2A97-20

SALMON CATCH AND ESCAPEMENT STATISTICS FOR COPPER RIVER, BERING RIVER, AND PRINCE WILLIAM SOUND, 1992.

By

Steven D. Moffitt

and

John A. Wilcock

REGIONAL INFORMATION REPORT[1] NO. 2A97-20

Alaska Department of Fish and Game
Commercial Fisheries Management and Development Division, Central Region
333 Raspberry Road
Anchorage, Alaska 99518

June 97

---

[1] Contribution 2C97-02 from Prince William Sound area. The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished Divisional reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this eries undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author of the Commercial Fisheries Management and Development Division.

AUTHORS

Steven D. Moffitt is an assistant area research biologist with the Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, P.O. Box 669, Cordova, Alaska 99574-0669.

John A. Wilcock is the Copper/Bering River salmon and Prince William Sound herring research biologist with the Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, P.O. Box 669, Cordova, Alaska 99574-0669.

ACKNOWLEDGMENTS

The authors would like to thank all the supervisors, managers, tender captains, dock foremen, floor bosses, office personnel, and individuals in the salmon processing industry who have provided assistance to our catch sampling program in the port of Cordova. The ADF&G catch and escapement sampling crew members were: Daryl Blake, Tad Lindley, Tracy Papenfuss, Diane Phipps, Cecil Rich, and Cece Stack. Cordova Area management biologists Wayne Donaldson, Slim Morstad, Ellen Simpson, and their data entry staff, Leah Merritt and Patrica Trautman, provided the basic catch and escapement data for this report. Ken Roberson supervised the collection of samples from the subsistence and personal use fisheries on the upper Copper River. The Collins family of Long Lake volunteered their time and effort to install, maintain, and operate a weir at Long Lake.

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF TABLES (Continued)

LIST OF FIGURES

LIST OF FIGURES (Continued)

LIST OF APPENDICES

LIST OF APPENDICES (Continued)

Page

LIST OF APPENDICES (Continued)

Page

LIST OF APPENDICES (Continued)

Page

LIST OF APPENDICES (Continued)

LIST OF APPENDICES (Continued)

ABSTRACT

The 1992 catch and escapement statistics for Pacific salmon *Oncorhynchus* species in the Copper River, Bering River, and Prince William Sound areas are summarized as a reference for management of the salmon resource. Catch information was compiled from commercial fish tickets, subsistence and personal-use fish permits, and a postal survey of sport fishermen. Escapement data were taken from aerial and ground surveys, side scan-sonar counts, weir counts, and brood stock counts. Stratified systematic samples of age, sex, and size were collected from salmon catches and escapements using standard sampling techniques for each select species, gear type, and fishing district.

Commercial, subsistence, personal-use, and sport fishermen harvested 13,188,448 salmon in the Copper River, Bering River, and Prince William Sound areas in 1992. Pink salmon *Oncorhynchus gorbuscha* were predominant in the combined total commercial catch from Prince William Sound, and >89% of the pink salmon total commercial catch were hatchery fish. The escapement index for all species and areas was 1,571,614 salmon. Temporal variations in age composition of the catch were observed for chinook salmon *O. tshawytscha* and coho salmon *O. kisutch* in the Copper River District, for sockeye salmon *O. nerka* in the Copper River and Eshamy Districts, and for chum salmon *O. keta* in the Coghill and Eshamy Districts.

KEY WORDS: Salmon, ***Oncorhynchus***, Copper River, Bering River, Prince William Sound, catch, escapement, age, length, sex, weight

INTRODUCTION

Estimated 1992 Pacific salmon *Oncorhynchus* catches and escapements from the Prince William Sound management area were summarized and integrated with age, sex, and size composition data to provide the basic biological information necessary for effective management of the resource. This information can be used to predict run strength based on parent and brood year returns, evaluate hatchery contributions, and assess harvest policies designed to effect maximum sustained yield.

Harvest and escapement abundance data, as well as age, sex, and size information are collected annually in monitoring programs maintained by the Alaska Department of Fish and Game (ADF&G). Detailed harvest and escapement information for the Prince William Sound management area is presented by Merritt et al. (1993) and Donaldson et al. (1993). These estimates are combined with age, sex, and size data obtained in 1992 and summarized in this report by species for each sampled fishery. This report adds to the database established by Sharr and Peckham (1988), Sharr et al. (1988), Crawford and Simpson (1989), Crawford and Simpson (1990), Wilcock (1993), Moffitt et al. (1994), and Moffitt et al. (1995). Detailed information for each fishery is presented in the Appendix.

The Prince William Sound management area is divided into 11 fishing districts that encompass coastal waters and associated inland watersheds of the Gulf of Alaska between Cape Suckling and Cape Fairfield (Figure 1). The Copper River District (212) and Bering River District (200) to the east of Hook Point, Hinchinbrook Island, have historically been treated as a discrete unit termed the Copper/Bering River area (Figure 2). Prince William Sound (PWS) proper lies to the west of Hook Point and includes the Eastern (221), Northern (222), Coghill (223), Northwestern (224), Eshamy (225), Southwestern (226), Montague (227), and Southeastern (228) Districts. The Unakwik District, previously designated as District 222-50, was redesignated as District 229 beginning in 1989.

Copper/Bering River Area

Drift gillnets are the only legal commercial gear type in the Copper and Bering River Districts. Sockeye *Oncorhynchus nerka*, coho *O. kisutch*, and chinook salmon *O. tshawytscha* are the predominant species in the Copper River District harvest. In the Bering River District, sockeye and coho salmon predominate the catch. Pink salmon *O. gorbuscha* and chum salmon *O. keta* catches are generally considered incidental in both districts.

A subsistence fish wheel and dip net fishery on the upper Copper River extends from Chitina to Slana (Figure 3). In addition, a personal use dip net fishery is restricted to a few miles of the river near Chitina. These fisheries harvest a large portion of the sockeye and chinook salmon migrating through the area. Subsistence fishing is also permitted in the coastal commercial fishing areas simultaneously with commercial openings, but harvests of all species are generally low.

Sport fishermen in the Copper/Bering River area target primarily chinook and sockeye salmon in the upper Copper River drainage, and coho and sockeye salmon in a few coastal streams.

Hatchery runs of sockeye salmon to the Copper River originate from the Gulkana I and II streamside incubation facilities located on the Gulkana River in the upper Copper River drainage.

Wild sockeye salmon in the Copper and Bering River Districts spawn in tributaries and lakes of the upper Copper River, small coastal streams and lakes in the Copper River delta, and tributaries of the Bering River (ADF&G 1962). Coho salmon spawn primarily in coastal streams, whereas chinook salmon spawn almost exclusively in tributaries of the upper Copper River (ADF&G 1964; Thompson 1964).

Prince William Sound Area

Wild and hatchery salmon are harvested in several commercial fisheries throughout PWS; Terms used to distinguish these aspects of the commercial harvest are as follows:

> *Commercial Common Property Catch* - all salmon harvested by the traditional competitive commercial fisheries (gillnet and purse seine) as opposed to *other commercial harvests* resulting from hatchery cost recovery, confiscated fish, or educational permits.
>
> *Hatchery Cost Recovery Catch* or *Hatchery Sales Harvest* - all salmon caught and sold by private non-profit hatcheries to pay for their operating expenses. This catch is taken in *special harvest areas* (SHA) adjacent to the hatchery by fishermen under contract to the facility operators.
>
> *Total Commercial Catch* - all salmon that are caught and sold commercially.

Purse seines are generally permitted in commercial common property fisheries in all districts of PWS, except the Eshamy District (225) where only set and drift gillnet gear are permitted. Drift gillnets are also permitted in the Coghill (223) and the Unakwik (229) Districts.

Purse seine fisheries have historically harvested most of the pink and chum salmon total commercial catch, as well as significant incidental catches of sockeye salmon. Gillnet fisheries, having much smaller total harvests than purse seine fisheries, traditionally target sockeye salmon. In recent years large catches of pink and chum salmon have coincided with increased hatchery production of these species. Historically, harvests of chinook and coho salmon in PWS have been incidental, but fishermen have recently begun to target coho salmon returns to the Wally Noerenberg Hatchery on Esther Island. Initial returns of coho salmon to this facility began in 1987 from releases the previous year. Southwestern District purse seine fishermen also intercept many coho salmon returning to the Wally Noerenberg Hatchery. Substantial coho catches also occur in Valdez Arm and Port Valdez from Solomon Gulch Hatchery releases.

Subsistence harvests of salmon in PWS, mostly sockeye salmon, are extremely small. Pink and coho salmon are the predominant species harvested in PWS sport fisheries. Although the harvest occurs primarily in marine waters, considerable sport fishing is also directed toward sockeye salmon in Coghill River and Eshamy Lagoon.

Five hatcheries are currently operating in PWS: the Solomon Gulch, Cannery Creek, Wally Noerenberg, Main Bay, and Armin F. Koernig Hatcheries (Figure 1). The Solomon Gulch, Wally Noerenberg, and Armin F. Koernig facilities are owned and operated by private, nonprofit organizations and primarily produce pink and chum salmon. The Cannery Creek facility, which primarily produces pink salmon, is owned by the state of Alaska and has been operated under contract by PWSAC since July of 1988. In 1990 PWSAC also assumed operation of the state-owned Main Bay Hatchery. The Main Bay Hatchery is raising full-term, age-1 (reared in the hatchery over winter) sockeye salmon smolts. This facility originally produced chum salmon. The last chum salmon smolt were released in 1987, and some adults from this release will continue to return through 1992.

Wild pink and chum salmon spawn in hundreds of small coastal streams on the mainland and islands throughout PWS. The largest sockeye salmon escapements occur in Coghill Lake and Eshamy Lake. Other sockeye spawning areas include Cowpen, Miners, Shrode and Jackpot Lakes; and Billy's Hole.

METHODS

Enumeration of Catch

Commercial salmon catches and fishing effort by fishing period and district or subdistrict were tabulated (Merritt et al. 1992) from fish tickets, i.e., sales receipts supplied by fishermen and processors. Processors often estimated the number of fish caught in landings by dividing landing weight by an estimated mean weight of that species. Because there is variation associated with estimates of mean weight, estimates of numbers caught may not be precise. The estimated mean weight and corresponding variance were not reported on fish tickets; therefore, the estimated numbers caught were assumed to represent the actual catch.

Subsistence and personal use catches recorded on returned fishery permits were summed to provide total estimates. The catch figures are preliminary and may differ slightly from final published figures, and are also low because all permits were not returned.

All sport fishery catches were estimated from postal surveys. Estimates were checked and validated with creel census data from selected fisheries (Mills 1993).

Enumeration of Hatchery Runs

Hatchery fish were caught in commercial fisheries concurrently with wild fish. Estimated hatchery contributions of pink salmon to commercial common property and hatchery cost recovery harvests in 1992 were derived from coded wire tag recapture data (Geiger 1990). Brood stock fish were enumerated in annual summary reports for each facility and summarized by Donaldson et al. (1993).

Enumeration of Escapements

Salmon stocks of the Copper/Bering River and PWS areas for which escapement data were available were grouped into runs according to major spawning areas. In the Copper/Bering River area, stocks were grouped into two runs: (1) the delta/Bering run, which includes all stocks of sockeye and coho salmon that spawn in coastal lakes and streams of the Copper River delta and Bering River watersheds; and (2) the upriver run, which includes all stocks of sockeye and chinook salmon that spawn in the Copper River watershed upstream of Miles Lake.

Estimates of sockeye and coho salmon escapements to coastal Copper River delta and Bering River tributaries were based on peak aerial survey counts of selected spawning areas. Aerial survey results represent indices of the relative abundance of escapements between stocks and years; however, they were used as estimates of total escapement in the absence of more precise data.

The upriver escapement of sockeye salmon in the Copper River was estimated using side-scanning sonar located at the outlet of Miles Lake (Figure 2). The escapement to Long Lake in the Chitina River drainage was counted through a weir on the lake outlet and was also included in the Miles Lake sonar count. The relative contributions of selected stocks to the total upper Copper River escapement were indexed by periodic aerial surveys.

For PWS, pink and chum salmon in 215 index streams were enumerated from weekly aerial surveys using methods similar to those described by Pirtle (1977). Survey counts were adjusted by dividing the area under the survey counts versus time curve by an estimated stream residence time (Johnson and Barrett 1986). Dividing by stream residence time reduces bias from counting the same fish on successive surveys. Recent studies (S. Sharr, ADF&G, Cordova, personal communication) indicate that the estimated stream residence time of 17.5 days (Helle et al. 1964) is probably too high for most PWS streams. Salmon escapements to Coghill and Eshamy Lakes were enumerated with weirs.

Sampling Procedures

Catches and escapements were sampled to determine their age, sex, length, and weight. One scale was collected from each sampled sockeye and chum salmon, and three scales were collected from each sampled chinook and coho salmon. Pink salmon were not sampled for age data. Scales were taken from the left side two rows above the lateral line in an area transected by a diagonal line from the posterior base of the dorsal fin to the anterior base of the anal fin (INPFC 1963). Scales were mounted on gum cards and impressions were made in cellulose acetate (Clutter and Whitesel 1956). Scale growth patterns were examined to determine the age of each fish sampled. Whenever marine growth zones on scales were resorbed, marine age was determined using length frequency analysis (Tesch 1970). Length in millimeters was measured from the middle of the eye to the fork of the tail. Sex was determined by morphological characteristics, or when possible, by gonadal inspection.

Commercial Fishery Sampling

Age and sex composition of the season catch for each combination of species, gear, and fishing district were estimated using stratified systematic sampling (Cochran 1977). Based on temporal distribution of past catches, contiguous fishing periods were combined to form sampling strata that would provide anticipated catches of similar magnitudes for all strata. The number of strata were based on temporal changes in age composition in previous years. Catches for which there were no valid historical estimates of age and sex composition were divided into three or four strata to expose moderate temporal changes. Whenever possible, sampling occurred on a single day near the temporal midpoint of each stratum. For the Copper River District, fish in each sample were randomly selected from processors without regard to tender vessel or subdistrict of capture because Sharr (1983) found no differences in age composition among 1982 tender loads from subdistricts within District 212.

Sample-size goals for each commercial catch stratum were 600 sockeye salmon from the Copper/Bering River area, and 610 sockeye salmon from PWS, 600 chinook salmon, 450 coho salmon, and 400 chum salmon from both the Copper/Bering River and PWS areas. These goals were originally selected so that sufficient numbers of ageable scales would be collected to simultaneously estimate the proportion of each major age class in the catch within ±5% of the true proportion 90% of the time based on the normal approximation of a binomial proportion (Goodman 1965; Cochran 1977). However, Thompson's (1987) work on the "worst case" parameter value for the multinomial distribution suggests that these goals may actually result in simultaneously estimating the true percentage of each age group within ±5% over 95% of the time.

Age composition and the associated variance were estimated by procedures outlined in Cochran (1977) for stratified sampling as follows:

$$C_{tj}=C_t P_{tj} \quad ; \tag{1}$$

$$V[C_{tj}] = (C_t)^2 \frac{P_{tj}(1-P_{tj})}{N_t - 1} \quad ; \tag{2}$$

$$C_j = \sum_{t=1}^{T} C_{tj} \quad ; \tag{3}$$

$$V[C_j] = \sum_{t=1}^{T} V[C_{tj}] \quad ; \tag{4}$$

where:

C_t = the number of fish caught during stratum t,

P_{tj} = the fraction of the sample taken during stratum t that is age j,

N_t = the sample size during stratum t,

C_{tj} = the estimated number of fish of age j caught during stratum t,

T = the number of strata, and

C_j = the estimate of the number of fish of age j caught during the season.

A correction factor for finite populations was not included in the variance calculations because sample sizes were generally small relative to catches.

Subsistence and Personal Use Fishery Sampling

A stratified systematic sampling program was established for collecting sockeye salmon age, sex, and length samples from the upper Copper River subsistence and personal use fisheries. Sample stratification was based on commercial catch projections by fishing period and migratory timing

data for upriver stocks (Merritt and Roberson 1983), but some inseason modifications occurred because of logistical constraints. Fish wheel and dip net catches were sampled disproportionately during the season, but because gear differences and temporal differences could not be distinguished, catch samples from these gear types were pooled.

The same formulae used for estimating numbers of fish by age in commercial catches were used to estimate subsistence and personal use catches by age. Age, sex, and size composition of chinook and coho salmon from upriver fisheries were not estimated because of the small harvests.

Copper/Bering River Escapement Sampling

Neither comprehensive enumeration studies nor detailed stratified sampling have been feasible for all coastal salmon streams of the Copper River delta and Bering River watersheds. Consequently, aerial surveys were used to estimate escapement to these areas. Simple systematic sampling described sex and age and the associated variance as follows:

$$E_j = A_m Q_j \quad ; \tag{5}$$

$$V[E_j] = (A_m)^2 \frac{Q_j(1 - Q_j)}{N - 1} \quad , \tag{6}$$

where:

E_j = the season escapement of fish of age j,

A_m = the peak number counted on the spawning grounds during aerial surveys,

Q_j = the estimate of the portion of the escapement of age j pooled over one or two sampling trips to the spawning grounds, and

N = the number of fish sampled in all sampling trips to the spawning grounds.

Because total escapement abundance to these areas was not available, peak aerial spawning ground counts were multiplied by age proportions to approximate numbers of fish in each age class.

Sockeye salmon scale samples from the Copper River subsistence and personal use fisheries were believed to also represent the age, sex, and size composition of upriver escapements because (1) these fisheries occur downstream of most major spawning tributaries of the system, and (2) the gear types used are believed to be relatively free from size selectivity. Age and sex composition

estimates from the catch strata were applied directly to the sonar counts from Miles Lake. Temporal stratification of the sonar-estimated escapement was simplified to two strata, and the passage dates were lagged to account for fish travel time between Miles Lake and Chitina. Mean travel times in days were approximated from a linear regression of travel rate versus date calculated from mark-recapture data (Merritt and Roberson 1983).

Prince William Sound Escapement Sampling

Stratified systematic sampling and weir counts were used to estimate the age, sex, and size composition of sockeye salmon escapements to Coghill and Eshamy Lakes. Simple systematic sampling and the aerial survey peak count were used to estimate the age, sex, and size composition of Miners Lake sockeye salmon escapements. With the exception of the drift gillnet fishery in the Esther Subdistrict of the Coghill District and the drift and set gillnet fisheries in the Eshamy District, chum salmon harvested in PWS are taken primarily with purse seines. Because purse seines are believed to be relatively non-selective for size and age, commercial catch samples were assumed to represent age, sex, and size composition of escapements. Scale samples from chinook and chum salmon in the Wally Noerenberg Hatchery brood stock were collected by PWSAC and evaluated by ADF&G personnel. These samples provided an estimate of the age, sex, and size composition of chinook and chum salmon escapements in the Coghill District.

RESULTS AND DISCUSSION

The total run of all species of salmon to the Copper/Bering River area and PWS in 1992 was estimated to be 13,188,448 fish (Table 1). The commercial common property fisheries harvest of pink salmon in PWS composed 42.3% (5,578,066 fish) of the total run. The next largest commercial harvest components were sockeye salmon in the Copper/Bering River area (7.51% or 990,659 fish), and in PWS (4.6% or 611,279 fish). Commercial catches exceeded all other harvest types for all species and areas except PWS chinook (Table 1). The subsistence/personal use harvest of sockeye salmon from the upper Copper River, 127,670 fish, exceed harvests in other areas by this user group, yet composed only 11.4% of the total catch of sockeye salmon in the Copper/Bering River area. The sport harvest of pink salmon in PWS totaled 31,600 fish. This harvest was 52.0% of the sport harvest of all species from the PWS and Copper/Bering River areas but only 0.3% of the total PWS pink salmon return.

Purse seine catches of 4,863,595 pink salmon in PWS commercial common property fisheries predominated the harvests of this species (Table 2). The largest catches of chum salmon, 233,501 fish, were harvested by PWS drift gillnet fishermen. Drift gillnet fishermen in the Copper/Bering River area had the largest commercial harvests of sockeye (990,659 fish), chinook (39,831 fish), and coho salmon (421,971 fish).

The personal use dip net catch of 84,981 sockeye salmon combined with the subsistence fish wheel and dip net catch of 42,689 sockeye salmon from the upper Copper River accounted for 99.4% of the subsistence/personal use harvest of this species and 93.6% of the subsistence/personal use harvest of all species from all areas (Table 3). Pink salmon caught in marine waters near Valdez by sport fishermen totaled 28,587 fish and composed 89.3% of the pink salmon sport harvest from all areas (Table 4). Coho salmon sport catches totaled 25,372 fish, of which 17,353 were taken in the vicinity of Valdez.

Adjusted aerial survey counts of PWS pink salmon escapements totaled 555,104 fish in 1992, and the largest portions were observed in the Eastern (204,383 fish) and Southeastern (95,070 fish) Districts (Table 5). Adjusted chum salmon counts of 61,707 fish in the Northern District and 48,804 fish in the Eastern District accounted for 79.2% of the total escapement of chum salmon in PWS. Sonar counts obtained from the Miles Lake facility totaled 601,952 fish; although species composition is not estimated for the sonar counts, the counts are assumed to be entirely sockeye salmon because they are highly dominant numerically. Peak aerial survey counts of chinook salmon from the upper Copper River area totaled 1,994 fish. Although aerial survey counts of upper Copper River coho, pink, and chum salmon were not reported, aerial observations indicated escapements for these species were small.

Appendices A and B present age and sex composition by species for all sampled strata of the Copper/Bering River area commercial, subsistence, personal use, and sport catches, as well as daily catches for upriver subsistence and personal use catches. Aerial survey counts, daily Miles Lake sonar and Long Lake weir counts, as well as age and sex composition of escapements by location, are presented in Appendices C and D. Appendix E contains age and sex composition of PWS commercial harvests for each sampled district and time stratum. Aerial escapement estimates, daily weir counts, and age and sex composition of PWS escapements are presented in Appendix F. Daily counts of hatchery brood stock runs and their age and sex composition are in Appendix G. Mean length by age and sex for all fish sampled can be found in Appendix H, and the average weights of commercially caught fish are in Appendix I.

Copper/Bering Rivers

The commercial, subsistence, personal use, and sport fisheries in the Copper River District (212) and the Bering River District (200) share geographic proximity, occur simultaneously, and are all directed at stocks of sockeye, coho, and chinook salmon returning to the Copper/Bering River area.

Chinook Salmon

Catch. Most of the 39,831 chinook salmon caught in the Copper River District in 1992 were harvested between 15 May and 08 June (Table 6; Figure 4). Percentage age composition of the

commercial common property catch was 12.8% age 1.3, 74.1% age 1.4, and 13.1% other age groups (Table 7). Fish aged 1.3 and 1.4 were the most numerous in the catch throughout the season (Appendix A.1). The proportion of age-1.4 fish increased from 70.4% on 22 May to 83.1% on 13 June (Figure 4).

A total of 4,741 chinook salmon were caught in the upper Copper River subsistence and personal use fisheries (Table 3). Most chinook salmon, 72.7%, were captured with dip nets, and the remainder were taken with fish wheels. Percentage age composition of the catch was 64.4 % age 1.4, 20.0% age 1.3, and 10.0% age 1.2..

Mills (1993) estimated a sport harvest of 4,412 chinook salmon from the upper Copper River drainage (Table 4). Virtually all of these fish were harvested in the Gulkana and Klutina River drainages.

Escapement. Peak aerial survey counts of the upper Copper River chinook salmon escapement totaled 1,994 fish (Appendix D.3) The escapement estimate for selected index streams was 1,057 fish compared to the 1982-91 average index of 3,233 (Donaldson et al. 1993).

Sockeye Salmon

Catch. In the Copper River District, 970,938 sockeye salmon were commercially harvested in 1992 (Table 8). Sockeye catches peaked during the second fishery opening on 25 and 26 May at 128,302 fish. Catches dropped sharply after the 01 June opening and then averaged about 44,000 fish until after 27 July (Figure 5).

Age composition of the commercial common property catch for all strata sampled was 69.7% age 1.3, 13.1% age 1.2, 8.1% age 2.3, and 9.1% other ages (Table 9). The percentage of age-1.3 fish decreased from 80.5% in early June to 55.9% in the first week of August (Figure 5; Appendix A.2). Fish aged 1.2 did not occur in the catch on 15 May but increased steadily to a high of 22.3% by late July.

The Bering River District sockeye fishery was opened on 15 June, 1 month later than the Copper River District (Table 8). Total sockeye salmon harvest for the district was 19,721 fish. The sampled catch was composed of 87.7% age-1.3, 9.0% age-1.2, and 3.3% other fish (Table 9; Appendix A.3).

The subsistence and personal use fisheries on the upper Copper River began on 1 June. A total of 127,670 sockeye salmon were harvested (Appendix B.1); peak daily catches occurred on weekends in late June and early through mid-July (Figure 6). Of the total catch, 30.2% were taken with fish wheels and 69.8% with dip nets. Fish aged 1.2 (11.9%) and 2.3 (3.9%) were lower in relative abundance than in the Copper River commercial catch (Table 9), whereas age-1.3 fish (75.8%) composed a larger portion than in the commercial catch. The contribution of age-1.3 fish increased from 59.3% in early June to 93.0% in mid-August (Appendix B.3; Figure 6). The percentage of age-0.3 fish decreased from a high of 13.2% in early June to only 0.8% by the first week of August.

Of the 4,560 sockeye salmon harvested by sport fishermen in the upper Copper River, 73.9% were caught in the Gulkana and Klutina River drainages (Table 4). The three coastal Copper River area streams listed by Mills (1993) (Eyak River, Alaganik Slough, and Clear Creek) had a combined sport harvest of 1,290 sockeye salmon (Table 4). The sport harvest from other coastal Copper River area streams was included in catches reported for PWS (Mills 1993).

Escapement. Aerial surveys indicated 76,827 sockeye salmon escaped into spawning areas of the Copper River delta and 55,895 sockeye salmon escaped into the Bering River drainage (Table 5; Appendix C.1). These data are not estimates of actual escapements but indices of the relative spawning escapements to those areas. Peak aerial survey counts were observed in mid-July for the Copper River delta and Bering River drainage (Figure 7). The most abundant age groups in escapements to the upper Copper River were fish aged 1.3 at 74.0%, 1.2 at 12.2%, and 0.3 at 5.9% (Table 10). Age 1.3 at 43.5% was the most abundant age group overall in Copper River delta escapements, and age 1.2 at 41.7% was the next most abundant (Appendix C.3). The Copper River delta sockeye salmon escapements had large temporal and spatial differences in age composition with river systems having much higher proportions of zero-check freshwater fish than lake systems (Appendix C.4). Fish aged 1.3 at 89.5% and 1.2 at 7.2% composed most of the Bering River escapements (Table 10; Appendix C.5).

An estimated 601,952 salmon passed the Miles Lake sonar site in 1992 (Table 5). Included in this count were 1,994 chinook salmon observed in upper Copper River aerial surveys (Appendix D.3) and 10,141 sockeye salmon counted through a weir at Long Lake (Appendix D.2). Aerial surveys of upper Copper River tributaries accounted for the spawning grounds distribution of 74,144 sockeye salmon (Appendix D.4). Escapement at the sonar site was monitored from late May to early August (Figure 7). Daily counts of 14-23,000 fish occurred from 6 June through 21 June, and a peak count of 23,709 occurred on 15 June (Appendix D.1). Estimated age composition of the escapement passed Miles Lake (Appendix D.6) was based on samples collected from upriver subsistence and personal use fisheries.

Coho Salmon

Catch. Substantial catches of coho salmon in the Copper River District began in mid-August and continued through late September (Table 11; Figure 8). Of the 291,627 coho salmon caught in the Copper River District, 59.5% were age 1.1 and 38.8% were age 2.1 (Table 12). A shift in the age composition occurred between early and late August (Appendix A.4). Age-1.1 and -2.1 fish each composed approximately 50% of the first catch sample in early August, but age-1.1 fish were more abundant in early September at 66.1% (Figure 8).

The 1992 commercial catch of coho salmon in the Bering River District was 125,616 (Table 11). At 48.5%, age-2.1 fish composed a smaller portion of the Bering River catch than of the Copper River commercial catch (Appendix A.5).

ADF&G estimated a subsistence and personal use catch of 1,859 coho salmon in the Copper/Bering River area (Table 3). Sport fishermen harvested 2,996 coho salmon from Eyak

River, 729 from Alaganik Slough, and an unknown number from a few other easily accessible coastal streams on the Copper River delta (Table 4). No age or sex composition data were collected for these fisheries.

Escapement. No aerial escapement estimates were made for coho salmon in the upper Copper River drainage in 1992, but aerial survey counts of coho salmon escapements to the upper Copper River are normally quite low. Aerial surveys indicated 44,563 coho salmon escaped to spawning areas in the Copper River delta and 16,300 to the Bering River drainage (Appendix C.2; Table 5); these data are not estimates of the actual escapements but indices of the relative spawning escapements to those areas. No age or sex composition data were collected for these fish.

Prince William Sound

Fisheries in the nine fishing districts in PWS (Districts 221-229) share geographic proximity, occur simultaneously, and are directed at salmon stocks of PWS origin.

Chinook Salmon

Commercial harvests of chinook salmon in PWS are incidental to fisheries directed towards other species (Table 13).

A total of 641 chinook salmon escaped into the brood pond at Wally Noerenberg Hatchery in 1992 (Appendix G.1). The age composition of the brood stock samples was 28.6% age 1.2 and 69.0% age 1.3 (Appendix G.6).

Sockeye Salmon

Catch. A total of 780,947 sockeye salmon were commercially harvested in PWS in 1992 (Table 2). The majority of the commercial common property catch came from the Eshamy District drift gillnet (373,596 fish) and set gillnet (144,568 fish) fisheries targeting the Main Bay Hatchery run. Catches in the Coghill District (57,919 fish) and the Unakwik District (2,224 fish) made up the remainder of the drift gillnet harvest. Most of the PWS common property purse seine catch of 32,972 sockeye salmon were caught in the Southwestern District (30,059 fish).

Sockeye catches in the Eshamy District were largest from mid-June through mid-July, and the largest weekly catch occurred in early July (Table 14; Figure 9). Age-1.2 fish composed 61.5%

of the Eshamy District catch (Table 15; Appendix E.2). Age-1.2 fish increased from 31.8% of the catch in mid-June to 75.9% in mid-August. (Figure 10).

The largest sockeye catches in the Coghill District occurred from late June to mid-July (Figure 9). The combined gear catch totaled 58,684 fish (Table 14). The most abundant age classes in the catch were age 1.3 at 57.4 % and age 1.2 at 33.9% (Table 15).

Unakwik District sockeye salmon catches peaked in late June and early July (Table 14; Figure 9). The age composition of the drift gillnet catch was 46.3% age 1.2, 31.7% age 1.3, and 9.8% age 2.3 (Appendix E.1).

The largest weekly purse seine catch of sockeye salmon in PWS, 12,027 fish, occurred in early August (Table 14) and accounted for 36.5% of the purse seine harvest. Most of the sockeye salmon purse seine harvest (92.2%) occurred in the Southwestern District. The most abundant Southwestern District age classes were age 1.2 at 68.0%, age 1.3 at 16.2%, and age 2.2 at 7.8% (Appendix E.3; Table 15).

Hatchery cost recovery harvests of sockeye salmon in PWS totaled 163,086 fish (Table 2). The majority, 97.4%, of the harvest was at Main Bay Hatchery. Age-1.2 at 70.1% was the most abundant and age-1.3 at 27.9% was next most abundant.

The reported subsistence harvest of sockeye salmon in PWS was 987 fish (Table 3). Age and sex composition data were not collected. A sport fishery harvest of 6,188 sockeye salmon was estimated for the PWS area (Table 4). Because Sport fish Division summarizes and reports sport harvests by area differently than the Division of Commercial fisheries, this estimate may include fish harvested from drainages included in Copper River delta/Bering River area.

Escapement. A total of 29,642 sockeye salmon were counted through the Coghill River weir in 1992 (Appendix F.1). Approximately 63% of the escapement passed the weir from 1 July through 19 July, and the peak daily count of 2,223 fish occurred on 1 July (Figure 11). The age composition was estimated at 87.4% age 1.3, 6.0% age 2.3, and 3.8% age 1.2 (Table 16). The contribution of age-1.3 fish was >87% for all samples (Figure 12; Appendix F.6). Age 1.2 in the escapement decreased from a high of 8.4% in late June to 2.8% in mid-July, whereas age 2.3 increased from 2.3% to 7.5% over the same period.

Escapement through Eshamy weir of 36,237 sockeye salmon (Appendix F.2) occurred later and was more prolonged than the Coghill weir escapement (Figure 11). Age composition of the escapement was 92.6% age 1.2, 2.4% age 2.2, and 2.3% age 1.3 (Table 16). The percentage of age-1.2 fish decreased from 95.1% in mid-July to 74..6% in late August (Figure 12; Appendix F.7). The percentage of age 2.2 increased from 1.9% in mid-July to 13.4% in late August.

A total of 1,600 sockeye salmon were used for brood stock at the Main Bay Hatchery (Appendix G.2). No age or sex composition data are available for these fish.

Coho Salmon

In 1992, 38,984 coho salmon were harvested by commercial common property purse seine and 89,166 coho salmon by commercial common property gillnet fisheries in PWS (Table 2). The largest purse seine catches occurred in the Coghill (70.2%) and Southwestern (23.3%) Districts. Nearly all (97.5%) of the coho salmon taken with gillnets in PWS were caught in the Coghill District. Most of these fish probably originated from the Wally Noerenberg Hatchery (C. Peckham, ADF&G, Cordova, personal communication). Coho catches peaked in the last week of August (Table 17; Figure 13). The Coghill District combined-gear coho salmon catch was 97.5% age 1.1 (Table 18; Appendix E.6).

The subsistence catch of coho salmon in PWS was 392 fish (Table 3). In recent years the sport fishery in PWS has been increasingly directed to coho salmon. Mills (1992) estimated that 20,767 coho salmon were caught by sport fishermen in PWS and the drainages of the Copper River delta and Bering River in 1992 (Table 4).

In addition to enhancement of commercial common property and sport harvests, hatchery coho salmon also contributed 73,530 fish to the hatchery cost recovery harvest (Table 2): Wally Noerenberg Hatchery at 46,121 fish and Solomon Gulch Hatchery at 27,409 fish.

A total of 1,107 coho salmon were used for brood stock at the Solomon Gulch Hatchery (Appendix G.3). Coho salmon, 1,020 fish, for brood stock at the Wally Noerenberg Hatchery were collected at Power Creek near Cordova. No age or sex data were collected from the Solomon Gulch or Wally Noerenberg Hatchery brood stocks.

Pink Salmon

The total commercial harvest of pink salmon in PWS for 1992 was 8,635,448 fish (Table 2). The commercial common property purse seine harvest of 4,863,595 fish was 56.3% of the PWS total harvest of pink salmon. Commercial common property purse seine fishermen harvested 62.5% of their catch in the Southwestern District, 23.1% in the Northern District, and 10.1% in the Eastern District (Figure 14; Table 2). Peak purse seine catches occurred in mid-July in the Eastern District and mid to late August in the Northern, Coghill, Southwestern, and Unakwik Districts (Figure 15).

The commercial common property purse seine and gillnet fisheries harvested 64.6% of the PWS total catch of pink salmon, and 35.4% were taken in hatchery cost recovery fisheries. Preliminary estimates from coded wire tag recoveries indicate that approximately 4,345,805 hatchery pink salmon were harvested in the commercial common property and 2,626,248 in hatchery cost recovery fisheries (Table 19). The total harvest of hatchery-produced pink salmon in PWS was estimated at 7,761,933 fish, or 89.9% of the total pink salmon harvest in PWS.

An estimated 31,591 pink salmon were caught by PWS sport fishermen, and 90.5% were taken in the marine waters near Valdez (Table 4).

Estimated escapements of wild pink salmon in PWS during 1992 (Appendix F.3) were >50% below 1966-1990 mean levels for even years in seven of eight districts (Donaldson et al. 1993). Escapement peaked for most districts in late August; however, the Eastern District peaked through most of August (Figure 16).

A total of 788,827 pink salmon were killed at the brood ponds of the Solomon Gulch, Cannery Creek, Wally Noerenberg, and Armin F. Koernig Hatcheries in 1992 (Appendix G.4). Out of the total killed, 561,013 or 71.1% were used for brood stock.

Chum Salmon

Of the 328,568 chum salmon in the PWS total commercial harvest, 233,501 fish or 71.1% were harvested in commercial common property drift gillnet fisheries, 30,088 fish or 9.2% in commercial common property purse seine fisheries, and 4,695 fish or 1.4% in the commercial common property set gillnet fishery (Table 2). Most of the gillnet catch occurred in the Coghill (76.6%) and Eshamy (23.4%) Districts where fishermen were targeting fish runs to the Wally Noerenberg and Main Bay hatcheries. Most of the commercial common property purse seine catch occurred in the Northern (48.0%), Southwestern (28.1%), and Eastern (18.1%) Districts (Table 21).

Peak catches in the Norther District occurred in early August (Figure 17). Drift gillnet catches in the Coghill District peaked in early July, whereas purse seine harvests peaked in late August. Gillnet catches in the Eshamy District peaked in early July (Figure 17).

The commercial common property purse seine catch of PWS chum salmon was composed of 81.0% age 0.3 and 14.3% age 0.4 (Table 21). The Norther/Unakwik District purse seine harvest was composed of 87.5% age 0.3 and 10.2% age 0.4, whereas the Southwestern District purse seine harvest was 69.7% age 0.3 and 19.6% age 0.4 (Appendices E.8 and E.11). For PWS gillnet catch samples, 72.8% were age 0.3 and age 0.4 composed most, 22.9%, of the remainder. The Coghill District the percentage of age-0.3 fish increased from 54.7% in mid-June to 83.5% in mid-July (Figure 18; Appendices E.9).

Hatchery cost recovery sales in 1992 accounted for 57,392 chum salmon or 17.5% of the PWS total commercial harvest of this species (Table 2). Wally Noerenberg Hatchery accounted for 87.9% of the PWS chum salmon hatchery cost recovery harvest.

Preliminary estimates from coded wire tag recapture data and fish tickets indicate that approximately 217,806 fish or 66.3% of the total commercial harvest originated from hatcheries (Table 22).

The subsistence harvest of chums was <300 fish. The estimated total PWS sport fishery harvest of chum salmon was 926 fish, 88.7% of which were caught in the marine waters near Valdez (Table 4).

A total of 144,316 chum salmon were taken for brood stock at Wally Noerenberg Hatchery in 1992 (Appendix G.5). The Wally Noerenberg Hatchery brood stock was composed of 28.6% age-0.3 fish and 69.0% age-0.4 fish (Appendix G.6).

Wild chum salmon escapements to surveyed PWS streams were estimated at 139,490 fish in 1992 (Appendix F.5). The escapements were below the 1965-1991 mean index in six of eight districts (Donaldson et al. 1993).

LITERATURE CITED

ADF&G (Alaska Department of fish and Game). 1962. Cordova area annual report, 1962. Alaska Department of fish and Game, Commercial fisheries Division, Region 2 Report (unpublished), Cordova.

ADF&G (Alaska Department of fish and Game). 1964. Cordova area annual report, 1964. Alaska Department of fish and Game, Commercial fisheries Division, Region 2 Report (unpublished), Cordova.

Clutter, R., and L. Whitesel. 1956. Collection and interpretation of sockeye salmon scales. Bulletin of the International Pacific Salmon fisheries Commission 9, Vancouver, British Columbia.

Cochran, W. 1977. Sampling techniques, 3rd edition. John Wiley & Sons, Inc. New York.

Crawford, D.L., and E.M. Simpson. 1989. Catch and escapement statistics for Copper River, Bering River, and Prince William Sound salmon, 1987. Alaska Department of fish and Game, Division of Commercial fisheries Division, Technical fishery Report 89-17, Juneau.

Crawford, D.L. and E.M. Simpson. 1990. Catch and escapement statistics for Copper River, Bering River, and Prince William Sound salmon, 1988. Alaska Department of fish and Game, Division of Commercial fisheries Division, Technical fishery Report 91-06, Juneau.

Donaldson W., S. Morstad, E. Simpson, J. Wilcock, and S. Sharr. 1993. Prince William Sound Management Area 1992 annual fin fish management report. Alaska Department of fish and Game, Commercial fisheries Division, Regional Information Report 2A93-12, Anchorage.

Geiger, H.J., editor. 1990. Pilot studies in tagging Prince William Sound hatchery pink salmon with coded-wire tags. Alaska Department of fish and Game, Division of Commercial fisheries, fishery Research Bulletin 90-02, Juneau.

Goodman, L. 1965. On simultaneous confidence intervals for multinomial populations. Technometrics 7:247-254.

Helle, J.H., R.S. Williamson, J.E. Bailey. 1964. Intertidal ecology and life history of pink salmon at Olsen Creek, Prince William Sound, Alaska. U.S. fish and Wildlife Service, Bureau of Commercial fisheries. Special Scientific Report-fisheries No. 483. Washington D.C.

INPFC (International North Pacific fisheries Commission). 1963. Annual report for 1961. Vancouver, British Columbia.

Johnson, B.A., B.S. Barrett. 1986. Estimation of salmon escapement based on stream survey data: a geometric approach. Alaska Department of fish and Game, Division of Commercial fisheries. Regional Information Report 4K88-35, Kodiak.

Merritt L., E. Simpson, and P. Trautman. 1993. Commercial salmon catch statistics for the Prince William Sound management area, 1992. Alaska Department of fish and Game, Division of Commercial fisheries, Regional Information Report 2A92-17, Anchorage.

Merritt, M., and K. Roberson. 1983. Migratory timing of upper Copper River sockeye salmon (*Oncorhynchus nerka*) stocks, and its management implications to the commercial fishery. Alaska Department of fish and Game, Division of Commercial fisheries, Informational Leaflet 225, Juneau.

Mills, M. 1993. Harvest, catch, and participation in Alaska sport fisheries during 1992. Alaska Department of fish and Game, Division of Sport fish, fishery Data Series 93-42, Juneau.

Moffitt, S.D., C. Rich, and J.A. Wilcock. 1994. Salmon catch and escapement statistics for Copper River, Bering River, and Prince William Sound, 1990. Alaska Department of fish and Game, Division of Commercial fisheries, Technical fisheries Report, Juneau.

Moffitt, S.D., C. Rich, and J.A. Wilcock. 1995. Salmon catch and escapement statistics for Copper River, Bering River, and Prince William Sound, 1991. Alaska Department of fish and Game, Division of Commercial fisheries, Technical fisheries Report, Juneau.

Pirtle, R.B. 1977. Historical pink and chum salmon estimated spawning escapements from Prince William Sound, Alaska streams 1960-1975. Alaska Department of fish and Game, Division of Commercial fisheries. Technical Data Report 35, Juneau.

Sharr, S. 1983. Catch and escapement statistics for Copper and Bering River sockeye (*Oncorhynchus nerka*), chinook (*O. tshawytscha*), and coho salmon (*O. kisutch*), 1982. Alaska Department of fish and Game, Division of Commercial fisheries, Technical Data Report 98, Juneau.

Sharr, S., and C. Peckham. 1988. Catch and escapement statistics for Copper River, Bering River, and Prince William Sound salmon, 1985. Alaska Department of fish and Game, Division of Commercial fisheries, Technical fisheries Report 88-16, Juneau.

Sharr, S., C. Peckham, and G. Carpenter. 1988. Catch and escapement statistics for Copper River, Bering River, and Prince William Sound salmon, 1986. Alaska Department of fish and Game, Division of Commercial fisheries, Technical fisheries Report 88-17, Juneau.

Tesch, F. 1970. Age and growth. Pages 98-126 *in* W. E. Ricker, editor. Methods for assessment of fish production in fresh waters. IBP Handbook No. 3, Blackwell Scientific Publications, Oxford, Great Britain.

Thompson, S.H. 1964. The red salmon (*Oncorhynchus nerka*) of Copper River, Alaska. United States Department of the Interior, fish and Wildlife Service, Bureau of Commercial fisheries, Biological Laboratory, Manuscript Report 64-12, Auke Bay.

Thompson, S. 1987. Sample size for estimating multinomial proportions. The American Statistician 41:42-46.

Wilcock, J.A. 1993. Salmon catch and escapement statistics for Copper River, Bering River, and Prince William Sound, 1989. Alaska Department of fish and Game, Division of Commercial fisheries, Technical fisheries Report 93-07, Juneau.

Table 1. Salmon harvest and indexed escapement by species and fishery element from the Copper/Bering River and and Prince William Sound areas, 1992.

Area and Fishery Element	Catch by Species (No. of Fish)				
	Chinook	Sockeye	Coho	Pink	Chum
Upper Copper River and Copper/Bering River Area					
Total Commercial Catch	39,831	990,659	417,243	1,668	5,808
Subsistence/Personal Use Catch	4,705	127,670	1,817	[b]	[b]
Sport Harvest [a]	4,521	6,730	4,346	411	38
Indexed Escapement	1,994	734,674	60,863	[c]	[c]
Upper Copper River and Copper/Bering River Total	51,051	1,859,733	484,269	2,079	5,846
Prince William Sound Area					
Total Commercial Catch	1,475	780,947	202,329	8,635,448	328,568
Subsistence Catch	3	987	392	343	148
Sport Harvest [a]	1,007	6,188	21,026	31,600	926
Indexed Escapement	[d]	79,489	[d]	555,104	139,490
Prince William Sound Total	2,485	867,611	223,747	9,222,495	469,132
Total All Areas	53,536	2,727,344	708,016	9,224,574	474,978

[a] Some minor sport harvests of anadromous salmon are not reported by specific locations. Consequently, upper Copper River estimates may include a small number of fish from Susitna River tributaries, and the Prince William Sound estimates may include a small number of fish from Copper River delta/Bering River coastal streams.

[b] A total of 156 fish of other species including steelhead and others, were reported caught but species composition was not estimated.

[c] Pink and chum salmon escapements to the upper Copper River and Copper/Bering River area are not indexed.

[d] Chinook and coho salmon escapements to Prince William Sound are not indexed.

Table 2. Commercial salmon harvest by species, gear type, and district for the Copper/Bering River and Prince William Sound areas, 1992.

Area/Gear	District or Hatchery Name	Statistical Area	Catch by Species (No. of Fish)				
			Chinook	Sockeye	Coho	Pink	Chum
Copper/Bering River Area							
Drift Gillnet	Copper River	212	39,810	970,939	296,704	1,663	5,807
	Bering River	200	21	19,720	125,267	4	1
Copper/Bering River Total			39,831	990,659	421,971	1,667	5,808
Prince William Sound Area							
Drift Gillnet	Coghill	223	242	57,919	86,894	167,384	182,433
	Eshamy	225	158	373,596	1,017	153,018	50,974
	Unakwik	229	3	2,224	13	3,972	94
	Total		403	433,739	87,924	324,374	233,501
Set Gillnet	Eshamy	225	101	144,568	1,242	390,097	4,695
	Total		101	144,568	1,242	390,097	4,695
Purse Seine	Eastern	221	2	562	239	489,228	5,458
	Northern	222	5	1,544	2,286	1,124,825	14,449
	Coghill	223	6	765	27,382	196,503	1,603
	Northwestern	224	0	0	0	0	0
	Southwestern	226	103	30,059	9,075	3,039,775	8,459
	Montague	227	0	0	0	0	0
	Southeastern	228	0	0	0	0	0
	Unakwik	229	0	42	2	13,264	119
	Total		116	32,972	38,984	4,863,595	30,088
Hatchery Cost Recovery Harvest[a]	Solomon Gulch	221–61	1	65	27,409	1,344,664	6,036
	Cannery Creek	222–21	0	0	0	363,667	0
	Wally Noerenberg	223–41	849	4,124	46,121	518,652	50,474
	Armin F. Koernig	226–62	0	6	0	822,411	0
	Main Bay	225–21	0	158,891	0	4,839	882
	Total		850	163,086	73,530	3,054,233	57,392
Educational Permit[b]	All Districts Combined		2	1,113	631	3,116	700
Confiscated	All Districts Combined		0	243	18	33	47
Test Fish	Eshamy/Coghill		3	5,232	0	0	2,145
	Total		5	6,588	649	3,149	2,892
Prince William Sound Total			1,475	780,953	202,329	8,635,448	328,568
Total All Areas and Gear Types			41,306	1,771,612	624,300	8,637,115	334,376

[a] Harvest is from purse seines.

[b] Cordova High School educational special permit.

Table 3. Subsistence and personal–use harvest by species, fishery, and gear type for the Copper/Bering River and Prince William Sound areas, 1992.

Area/Fishery	Gear	Location	Catch by Species (No. of Fish) Chinook	Sockeye	Coho	Other[a]
Copper/Bering River Area						
Personal Use	Dip Net	Upper Copper River	3,337	84,981	1,487	35
	Fish Wheel	Upper Copper River	0	0	0	0
	Total		3,337	84,981	1,487	35
Subsistence	Dip Net	Upper Copper River	109	4,130	11	0
	Fish Wheel	Upper Copper River	1,295	38,559	319	61
	Drift Gillnet	Copper/Bering River	142	785	42	30
	Total		1,546	43,474	372	91
Copper/Bering River Total			4,883	128,455	1,859	126
Prince William Sound						
Subsistence	Drift Gillnet	Prince William Sound General	0	20	0	0
	Mixed Gear[b]	Tatitlek	2	441	369	79
		Southwestern (Chenega)	1	526	23	412
Prince William Sound Total			3	987	392	491
Total All Areas			4,886	129,442	2,251	617

[a] Includes steelhead, char, whitefish, other salmon, and miscellaneous species.

[b] Special subsistence harvest initiated in 1989.

Table 4. Sport fishery harvest and effort by location and species in the upper Copper River and in the combined Copper River delta, Bering River, and Prince William Sound areas, 1992.

Area	Location/Fishery	Anglers	Trips	Days Fished	Sport Fish Harvest by Species: Chinook	Sockeye	Coho	Pink	Chum
Upper Copper River [a]	Gulkana River								
	Float – Paxson to Sourdough	2,979	2,506	6,391	416	690	0	0	0
	Float – Sourdough to Highway	4,139	3,989	7,426	1,395	255	0	0	0
	Other	5,772	6,507	11,833	1,260	1,068	0	0	0
	Klutina River	3,515	4,076	6,281	1,075	1,356	24	0	0
	Tonsina River	1,097	1,134	1,622	143	99	73	0	0
	Other Streams	2,860	3,247	5,127	106	829	16	0	0
	Tolsona Lake	623	374	779	0	0	0	0	0
	Van (Silver) Lake	2,157	1,508	2,582	0	0	0	0	0
	Paxson Lake	3,091	2,605	4,247	0	25	0	0	0
	Summit Lake (near Paxson)	1,758	1,708	2,454	0	82	0	0	0
	Crosswind Lake	524	636	1504	0	8	0	0	0
	Other Lakes	4,684	4,466	8,309	17	148	0	0	0
Area Total		33,199 [b]	32,756	58,555	4,412	4,560	113	0	0
Copper River delta, Bering River, and Prince William Sound	**Freshwater:**								
	Eyak River	1,658	4,812	5,239	0	419	2,996	0	0
	Eshamy Lake, Creek, and Lagoon	474	536	1,013	0	460	32	9	0
	Robe River Drainage	424	947	992	0	0	227	0	0
	Alaganik Slough	723	1,471	2,134	109	452	729	0	30
	Clear Creek	436	748	918	0	419	16	0	0
	Other Streams	1,590	2,055	2,892	0	320	419	402	8
	Other Lakes	1,145	1,595	2,032	0	560	73	9	0
	Subtotal	6,450	12,164	15,220	109	2,630	4,492	420	38
	Saltwater:								
	Valdez Bay–								
	Boat	16,840	22,923	38,823	255	1,504	12,300	14,518	592
	Shoreline/Road System	6,956	9,586	15,226	39	649	4,373	11,230	182
	Shoreline/Remainder	1,720	3,015	5,401	23	0	680	2,839	30
	Passage Canal (Whittier)–								
	Boat	1,708	2,132	3,713	16	419	243	412	0
	Hinchinbrook Island–Boat	499	873	1,924	31	0	0	0	0
	Orca Inlet–								
	Boat	2,032	4,600	6,476	110	58	502	0	8
	Shoreline	1,134	2,692	2,838	94	0	810	37	0
	Esther Island								
	Boat	1,596	1,807	3,030	299	559	154	467	91
	Montague Island								
	Boat	461	498	943	0	0	0	0	0
	Naked Island								
	Boat	311	411	1,157	0	16	0	9	0
	Other–								
	Boat	7,269	8,874	15,162	124	2,096	1,074	1,713	23
	Shoreline	1,477	2,339	3,530	16	427	631	366	0
	Subtotal	42,003 [b]	59,750	98,223	1,007	5,728	20,767	31,591	926
Area Total		48,453 [b]	71,914	113,443	1,116	8,358	25,259	32,011	964
Total All Areas		81,652 [b]	104,670	171,998	5,528	12,918	25,372	32,011	964

[a] Includes drainages of the Copper River upstream from a line between the south bank of Haley Creek and the south bank of Canyon Creek in Wood Canyon, and the upper Susitna River drainage below its confluence with the Oshetna River. Does not include the Oshetna River.

[b] Maximum estimate. Includes some fishermen who may have fished in more than one location.

Table 5. Salmon escapement and escapement indices by species and district in the Copper/Bering River and Prince William Sound areas, 1992.

Area and District	Statistical Area	Escapement by Species				
		Chinook	Sockeye	Coho	Pink	Chum
Copper/Bering River Area[a]						
Copper River –	212					
Copper River delta			76,827	44,563		
Upper Copper River		1,994	601,952 [b]			
Bering River	200		55,895	16,300		
Area Total		1,994	734,674	60,863		
Prince William Sound Area[c]						
Eastern	221		80 [d]		204,383	48,804
Northern	222		600 [d]		70,415	61,707
Coghill	223		34,652 [e]		23,611	10,003
Northwestern	224		2,310 [d]		42,308	11,072
Eshamy	225		36,237 [f]		2,709	300
Southwestern	226		3,100 [d]		66,953	2,940
Montague	227		100 [d]		47,156	783
Southeastern	228				95,070	3,881
Unakwik	229		2,410 [d]		2,500	0
Area Total			79,489		555,104	139,490

[a] Based on periodic aerial surveys of salmon streams and includes counts from all systems surveyed, not just the historical index streams (Appendices C.1–2, D.3). Does not account for escapement into unsurveyed systems. Escapements of salmon species not noted are small and not indexed.

[b] Miles Lake sonar count (Appendix D.1). Species composition was not estimated; however, sockeye salmon are by far the most abundant species. Aerial surveys indicated coho, pink, and chum salmon escapements to the upper Copper River were small.

[c] Escapement indicies for pink and chum salmon in Prince William Sound are based on aerial counts of regularly surveyed streams adjusted for stream life and do not account for escapement into unsurveyed streams. Escapements of other salmon species are generally insignificant and not recorded except as noted.

[d] Based on peak observed aerial count of selected systems during regularly scheduled surveys.

[e] Based on weir counts plus peak observed aerial counts of other district streams in scheduled surveys.

[f] Weir count.

Table 6. Copper/Bering River chinook salmon catch and effort by the commercial common property fishery, by district and fishing period, from fish ticket summaries, 1992.

Statistical Week	Period Dates	Copper River			Bering River		
		Hours	Effort [a]	Catch	Hours	Effort [a]	Catch
20	5/15–5/15	12	427	5,468		Closed	
21	5/19–5/19	12	460	4,723		Closed	
21	5/22–5/22	12	469	8,361		Closed	
22	5/25–5/26	24	497	7,519		Closed	
22	5/28–5/29	24	510	6,755		Closed	
23	6/01–6/01	12	508	3,055		Closed	
24	6/08–6/08	12	488	1,729		Closed	
24	6/12–6/12	12	491	902		Closed	
25	6/15–6/15	12	350	341	12	33	13
25	6/18–6/20	36	415	517	36	30	2
26	6/22–6/23	24	394	195	24	11	1
26	6/25–6/27	36	282	134	36	14	0
27	6/29–6/30	24	177	35	24	5	4
27	7/02–7/04	36	145	10	36	2	0
28	7/06–7/07	36	173	12		Closed	
28	7/09–7/11	48	193	18		Closed	
29	7/13–7/14	36	185	8		Closed	
29	7/16–7/18	48	175	10		Closed	
30	7/20–7/24	108	256	6		Closed	
31	7/27–7/29	48	190	2		Closed	
31	7/30–8/01	48	117	0		Closed	
32	8/03–8/04	24	74	1		Closed	
32	8/06–8/07	24	86	1		Closed	
33	8/10–8/11	24	152	1		Closed	
33	8/13–8/14	24	129	0		Closed	
34	8/17–8/18	24	243	2	24	4	0
34	8/20–8/21	24	279	3	24	22	0
35	8/24–8/26	48	285	2	48	43	0
36	8/31–9/02	48	263	0	48	126	0
36	9/03–9/04	24	213	0	24	91	0
37	9/07–9/09	48	227	0	48	100	1
37	9/10–9/11	24	200	0		Closed	
38	9/14–9/16	48	190	0	48	115	0
39	9/21–9/23	48	151	0	48	74	0
Total		1,092	525	39,810	480	183	21

[a] Number of permits reporting catches.

Table 7. Estimated age composition of Copper River area chinook salmon in commercial common property drift gillnet catches and subsistence and personal–use catches, 1992.

Fishery Element	Area	Sample Size	Total Catch	Percentage of Catch or Escapement by Brood Year and Age Group													
				1989	1988		1987			1986				1985		1984	
				1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	2.3	3.2	1.5	2.4	2.5	3.4
Commercial Common Property Catch	Copper River District	1,996	39,810	0.1	0.2	4.3	0.4	12.8	0.7	0.0	74.1	1.3	0.1	0.9	4.9	0.1	0.1
Subsistence/ Personal Use	Upper Copper River	90	4,705	3.3	0.0	10.0	0.0	20.0	1.1	0.0	64.4	1.1	0.0	0.0	0.0	0.0	0.0

Table 8. Copper/Bering River area sockeye salmon catch and effort by commercial common property fishery, by district and fishing period, from fish ticket summaries, 1992.

Statistical Week	Period Dates	Copper River			Bering River		
		Hours	Effort [a]	Catch	Hours	Effort [a]	Catch
20	5/15–5/15	12	427	10,249		Closed	
21	5/19–5/19	12	460	29,093		Closed	
21	5/22–5/22	12	469	55,361		Closed	
22	5/25–5/26	24	497	128,302		Closed	
22	5/28–5/29	24	510	79,781		Closed	
23	6/01–6/01	12	508	60,433		Closed	
24	6/08–6/08	12	488	51,857		Closed	
24	6/12–6/12	12	491	45,297		Closed	
25	6/15–6/15	12	350	44,890	12	33	5,701
25	6/18–6/20	36	415	64,671	36	30	6,053
26	6/22–6/23	24	394	45,751	24	11	3,498
26	6/25–6/27	36	282	42,401	36	14	2,368
27	6/29–6/30	24	177	27,528	24	5	1,662
27	7/02–7/04	36	145	40,031	36	2	356
28	7/06–7/07	36	173	43,149		Closed	
28	7/09–7/11	48	193	46,740		Closed	
29	7/13–7/14	36	185	31,656		Closed	
29	7/16–7/18	48	175	40,576		Closed	
30	7/20–7/24	108	256	50,077		Closed	
31	7/27–7/29	48	190	12,056		Closed	
31	7/30–8/01	48	117	9,301		Closed	
32	8/03–8/04	24	74	2,392		Closed	
32	8/06–8/07	24	86	3,566		Closed	
33	8/10–8/11	24	152	2,572		Closed	
33	8/13–8/14	24	129	961		Closed	
34	8/17–8/18	24	243	1,192	24	4	0
34	8/20–8/21	24	279	586	24	22	41
35	8/24–8/26	48	285	305	48	43	31
36	8/31–9/02	48	263	87	48	126	6
36	9/03–9/04	24	213	43	24	91	1
37	9/07–9/09	48	227	22	48	100	3
37	9/10–9/11	24	200	7		Closed	
38	9/14–9/16	48	190	4	48	115	0
39	9/21–9/23	48	151	1	48	74	1
Total		1,092	525	970,938	480	183	19,721

[a] Number of permits reporting catches.

Table 9. Estimated age composition of Copper/Bering River sockeye salmon in commercial common property drift gillnet catches and upper Copper River subsistence and personal–use fish wheel and dip net catches, 1992.

Fishery Element	Area	Sample Size	Total Catch	Percentage of Catch by Brood Year and Age Group									
				1989		1988		1987			1986		1985
				0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	2.4
Commercial Common Property Catch	Copper River	5,063	970,938	1.2	0.1	5.5	13.1	0.2	69.7	1.3	0.7	8.1	0.1
	Bering River	568	19,721	0.5	0.2	1.1	9.0	0.0	87.7	0.5	0.0	0.9	0.2
Subsistence/ Personal Use	Upper Copper River	2,858	127,670	0.8	0.0	5.1	11.9	0.2	75.8	1.9	0.5	3.9	0.0

Table 10. Estimated age composition of sockeye salmon in escapements to the Copper and Bering River systems, 1992.

Drainage System	Location	Sample Size	Escapement Index	Percentage of Escapement by Brood Year and Age Group											
				1989	1988		1987			1986			1985		1984
				0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	3.3
Copper River															
Upper Copper River	Miles Lake Sonar	2,858	601,952	0.0	0.9	0.0	5.9	12.2	0.0	0.1	74.0	2.1	0.5	4.2	0.0
Copper River Delta	Eyak Lake – South Beaches	513	14,200	0.0	5.3	0.0	3.3	47.6	0.0	0.0	43.1	0.4	0.0	0.4	0.0
	Eyak Lake – Middle Arm	705	9,000	0.0	0.2	0.4	2.6	18.0	0.2	0.1	73.5	1.3	0.0	3.7	0.0
	Eyak Lake – Hatchery Creek	370	1,600	0.0	0.3	0.3	14.7	6.0	0.0	0.0	78.2	0.0	0.0	0.7	0.0
	McKinley Lake	658	10,325	0.0	2.7	0.8	2.3	54.7	0.0	0.0	37.7	1.7	0.0	0.2	0.0
	27 Mile Creek	409	1,420	0.0	31.8	0.7	12.2	22.0	0.0	0.0	33.0	0.2	0.0	0.0	0.0
	39 Mile Creek	318	4,500	1.6	13.5	10.1	0.9	53.1	0.0	0.0	20.4	0.3	0.0	0.0	0.0
	Pleasent Creek	217	1,567	0.0	30.9	0.0	6.5	28.6	0.0	0.0	31.3	1.8	0.5	0.5	0.0
	Ragged Point River	345	2,600	0.0	15.1	3.2	3.8	17.4	0.0	0.0	58.3	0.6	0.0	1.7	0.0
	Martin Lake	750	6,300	0.0	3.8	1.5	1.3	63.9	0.0	0.0	28.3	0.8	0.0	0.4	0.0
	Little Martin Lake	90	3,200	0.0	6.7	6.7	1.1	83.3	0.0	0.0	2.2	0.0	0.0	0.0	0.0
	Tokun Lake	492	8,230	0.0	0.2	0.0	1.2	33.3	0.0	0.0	65.0	0.2	0.0	0.0	0.0
	Martin River Slough	566	3,955	0.0	24.2	0.0	19.1	29.7	0.0	0.0	26.7	0.0	0.0	0.4	0.0
Copper River Delta	Total	5,433	66,897	0.1	5.9	1.4	3.7	41.7	0.0	0.0	43.5	0.7	0.0	0.8	0.0
Bering River	Bering Lake	485	37,800	0.0	0.8	0.0	0.6	7.2	0.0	0.0	89.5	0.2	0.0	1.6	0.0
	Kushtaka Lake	171	237	0.0	0.6	4.7	0.6	46.8	0.0	0.0	38.0	5.8	0.0	3.5	0.0
Bering River	Total	656	38,037	0.0	0.8	0.0	0.6	7.5	0.0	0.0	89.2	0.2	0.0	1.7	0.0

Table 11. Copper/Bering River area coho salmon catch and effort by the commercial common property fishery, by district and fishing period, from fish ticket summaries, 1992.

Statistical Week	Period Dates	Copper River			Bering River		
		Hours	Effort [a]	Catch	Hours	Effort [a]	Catch
20	5/15–5/15	12	427	1		Closed	
21	5/19–5/19	12	460	3		Closed	
21	5/22–5/22	12	469	0		Closed	
22	5/25–5/26	24	497	0		Closed	
22	5/28–5/29	24	510	2		Closed	
23	6/01–6/01	12	508	0		Closed	
24	6/08–6/08	12	488	2		Closed	
24	6/12–6/12	12	491	0		Closed	
25	6/15–6/15	12	350	0	12	33	0
25	6/18–6/20	36	415	2	36	30	0
26	6/22–6/23	24	394	30	24	11	0
26	6/25–6/27	36	282	8	36	14	0
27	6/29–6/30	24	177	15	24	5	0
27	7/02–7/04	36	145	18	36	2	0
28	7/06–7/07	36	173	15		Closed	
28	7/09–7/11	48	193	172		Closed	
29	7/13–7/14	36	185	398		Closed	
29	7/16–7/18	48	175	432		Closed	
30	7/20–7/24	108	256	2,508		Closed	
31	7/27–7/29	48	190	602		Closed	
31	7/30–8/01	48	117	839		Closed	
32	8/03–8/04	24	74	1,403		Closed	
32	8/06–8/07	24	86	4,584		Closed	
33	8/10–8/11	24	152	6,835		Closed	
33	8/13–8/14	24	129	10,082		Closed	
34	8/17–8/18	24	243	33,728	24	4	776
34	8/20–8/21	24	279	38,123	24	22	3,474
35	8/24–8/26	48	285	53,295	48	43	16,317
36	8/31–9/02	48	263	50,911	48	126	35,753
36	9/03–9/04	24	213	15,077	24	91	10,221
37	9/07–9/09	48	227	34,771	48	100	29,581
37	9/10–9/11	24	200	11,697		Closed	
38	9/14–9/16	48	190	13,975	48	115	22,301
39	9/21–9/23	48	151	12,099	48	74	7,193
Total		1,092	525	291,627	480	183	125,616

[a] Number of permits reporting catches.

Table 12. Estimated age composition of Copper/Bering River area coho salmon in commercial common property drift gillnet catches, 1992.

Location	Sample Size	Commercial Catch	Percentage of Catch by Brood Year and Age Group			
			1990	1989	1988	1987
			1.0	1.1	2.1	3.1
Copper River	1,138	291,627	0.1	59.5	38.8	1.6
Bering River	721	125,616	0.0	47.7	48.5	3.8

Table 13. Prince William Sound chinook salmon weekly catch and effort by the commercial common property fishery, by district and gear type, from fish ticket summaries, 1992.

Statistical Week	Dates	Purse Seine Fisheries														
		Eastern District			Northern District			Coghill District			Southwestern District			Unakwik District		
		Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch
24	06/07 – 06/13		Closed			Closed			Closed			Closed			Closed	
25	06/14 – 06/20		Closed			Closed			Closed			Closed		24	0	0
26	06/21 – 06/27		Closed			Closed			Closed			Closed		48	0	0
27	06/28 – 07/04		Closed			Closed			Closed			Closed		48	0	0
28	07/05 – 07/11	12	57	1		Closed			Closed			Closed		48	0	0
29	07/12 – 07/18	112	94	1		Closed			Closed			Closed		48	0	0
30	07/19 – 07/25	44	33	0		Closed			Closed			Closed		48	0	0
31	07/26 – 08/01		Closed		24	73	2	24	4	1	24	199	32	48	5	0
32	08/02 – 08/08		Closed		36	197	2	24	3	0	36	339	64	48	4	0
33	08/09 – 08/15		Closed		45	86	1	45	33	2	45	308	6	48	6	0
34	08/16 – 08/22		Closed		72	50	0	72	40	2	72	214	1	48	1	0
35	08/23 – 08/29		Closed			Closed		76	28	1	100	82	0	48	0	0
36	08/30 – 09/05	36	1	0		Closed		168	24	0	168	0	0	24	0	0
37	09/06 – 09/12		Closed			Closed			Closed		68	0	0		Closed	
38	09/13 – 09/19		Closed			Closed			Closed			Closed			Closed	
39	09/20 – 09/26		Closed			Closed			Closed			Closed			Closed	
Total		204	68	2	0	93	5	409	59	6	513	174	103	528	10	0

–Continued–

Table 13. (Page 2 of 2)

Statistical Week	Dates	Gillnet Fisheries: Unakwik Drift Gillnet Hours	Unakwik Drift Gillnet Effort[a]	Unakwik Drift Gillnet Catch	Coghill Drift Gillnet Hours	Coghill Drift Gillnet Effort[a]	Coghill Drift Gillnet Catch	Eshamy Drift and Set Gillnet Hours	Eshamy Drift and Set Gillnet Effort[a]	Eshamy Drift and Set Gillnet Catch	Gillnet Total	Purse Seine Total	PWS Total Catch
24	06/07 – 06/13		Closed		24	17	54		Closed		54	0	54
25	06/14 – 06/20	24	0	0		Closed		72	117	102	102	0	102
26	06/21 – 06/27	48	1	0		Closed		72	233	78	78	0	78
27	06/28 – 07/04	48	8	1	36	502	39	60	363	25	65	0	65
28	07/05 – 07/11	48	0	0	24	159	32	60	345	22	54	1	55
29	07/12 – 07/18	48	2	0	24	204	100	48	306	21	121	1	122
30	07/19 – 07/25	48	8	0		Closed		12	97	1	1	0	1
31	07/26 – 08/01	48	11	0	24	81	11	96	76	1	12	35	47
32	08/02 – 08/08	48	3	2	24	87	2	100	75	3	7	66	73
33	08/09 – 08/15	48	3	0	45	99	1	168	72	6	7	9	16
34	08/16 – 08/22	48	0	0	72	136	2	168	55	0	2	3	5
35	08/23 – 08/29	48	0	0	72	212	0	168	36	0	0	1	1
36	08/30 – 09/05	24	0	0	168	480	1	168	12	0	1	0	1
37	09/06 – 09/12		Closed		168	415	0	168	2	0	0	0	0
38	09/13 – 09/19		Closed		168	71	0	168	2	0	0	0	0
39	09/20 – 09/26		Closed		168	10	0	168	0	0	0	0	0
40	09/27 – 10/03		Closed		168	0	0	168	0	0	0	0	0
Totals		528	16	3	1,185	345	242	1,864	405	259	504	116	620

[a] Number of permits reporting catches.

Table 14. Prince William Sound sockeye salmon weekly catch and effort by the commercial common property fishery, by district and gear type, from fish ticket summaries, 1992.

Statistical Week	Dates	Purse Seine Fisheries														
		Eastern District			Northern District			Coghill District			Southwestern District			Unakwik District		
		Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch
24	06/07 – 06/13		Closed			Closed			Closed			Closed			Closed	
25	06/14 – 06/20		Closed			Closed			Closed			Closed		24	0	0
26	06/21 – 06/27		Closed			Closed			Closed			Closed		48	0	0
27	06/28 – 07/04		Closed			Closed			Closed			Closed		48	0	0
28	07/05 – 07/11	12	57	69		Closed			Closed			Closed		48	0	0
29	07/12 – 07/18	112	35	313		Closed			Closed			Closed		48	0	0
30	07/19 – 07/25	44	24	180		Closed			Closed			Closed		48	0	0
31	07/26 – 08/01		Closed		24	45	402	24	3	240	24	103	11,076	48	3	3
32	08/02 – 08/08		Closed		36	67	882	24	3	118	36	126	11,022	48	4	5
33	08/09 – 08/15		Closed		45	33	193	45	16	234	45	153	5,629	48	6	33
34	08/16 – 08/22		Closed		72	25	67	72	13	51	72	75	2,081	48	1	1
35	08/23 – 08/29		Closed			Closed		76	10	111	100	40	251	48	0	0
36	08/30 – 09/05	36	1	0		Closed		168	5	11	168	0	0	24	0	0
37	09/06 – 09/12		Closed			Closed			Closed		68	0	0		Closed	
38	09/13 – 09/19		Closed			Closed			Closed			Closed			Closed	
39	09/20 – 09/26		Closed			Closed			Closed			Closed			Closed	
Total		204	68	562	177	93	1,544	409	59	765	513	174	30,059	528	10	42

–Continued–

Table 14. (page 2 of 2)

Statistical Week	Dates	Gillnet Fisheries: Unakwik Drift Gillnet Hours	Unakwik Drift Gillnet Effort[a]	Unakwik Drift Gillnet Catch	Coghill Drift Gillnet Hours	Coghill Drift Gillnet Effort[a]	Coghill Drift Gillnet Catch	Eshamy Drift and Set Gillnet Hours	Eshamy Drift and Set Gillnet Effort[a]	Eshamy Drift and Set Gillnet Catch	Gillnet Total	Purse Seine Total	PWS Total Catch
24	06/07 – 06/13		Closed		24	13	121		Closed		121	0	121
25	06/14 – 06/20	24	0	0		Closed		72	117	5,977	5,977	0	5,977
26	06/21 – 06/27	48	1	47		Closed		72	233	63,659	63,706	0	63,706
27	06/28 – 07/04	48	7	1,194	36	211	25,767	60	363	121,386	148,347	0	148,347
28	07/05 – 07/11	48	0	0	24	108	13,275	60	345	161,485	174,760	69	174,829
29	07/12 – 07/18	48	2	147	24	137	11,574	48	306	93,202	104,923	313	105,236
30	07/19 – 07/25	48	4	474		Closed		12	97	6,614	7,088	180	7,268
31	07/26 – 08/01	48	5	293	24	41	4,196	96	76	25,640	30,129	11,721	41,850
32	08/02 – 08/08	48	2	39	24	46	1,563	100	75	15,086	16,688	12,027	28,715
33	08/09 – 08/15	48	2	30	45	38	518	168	72	13,262	13,810	6,089	19,899
34	08/16 – 08/22	48	0	0	72	37	216	168	55	8,102	8,318	2,200	10,518
35	08/23 – 08/29	48	0	0	72	67	219	168	36	2,670	2,889	362	3,251
36	08/30 – 09/05	24	0	0	168	82	255	168	12	835	1,090	11	1,101
37	09/06 – 09/12		Closed		168	76	180	168	2	233	413	0	413
38	09/13 – 09/19		Closed		168	17	31	168	2	13	44	0	44
39	09/20 – 09/26		Closed		168	5	4	168	0	0	4	0	4
40	09/27 – 10/03		Closed		168	0	0	168	0	0	0	0	0
Totals		528	16	2,224	1,185	345	57,919	1,864	405	518,164	578,307	32,972	611,279

[a] Number of permits reporting catches.

Table 15. Estimated age composition of sockeye salmon in Prince William Sound commercial common property gillnet and purse seine catches, 1992.

				Percentage of Catch by Brood Year and Age Group											
				1990	1989		1988			1987		1986		1985	
Gear Type	District	Sample Size	Total Catch	0.1	0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	1.5	2.4
Gillnet	Coghill	628	57,919	0.0	0.0	0.0	0.4	33.9	0.0	57.4	4.0	0.2	4.0	0.0	0.2
	Eshamy	4,285	518,164	0.0	0.1	0.4	0.1	61.5	0.0	35.9	1.7	0.0	0.4	0.0	0.0
	Unakwik	41	2,266	0.0	4.9	0.0	2.4	46.3	0.0	31.7	2.4	2.4	9.8	0.0	0.0
Purse Seine	Northern	158	1,544	0.0	5.7	0.0	1.9	32.3	0.0	34.2	10.8	0.0	15.2	0.0	0.0
	Southwestern	1,156	30,059	0.1	5.2	1.3	0.9	68.0	0.2	16.2	7.8	0.0	0.3	0.1	0.0

Table 16. Estimated age composition of sockeye salmon in sampled escapements to Prince William Sound, 1992.

Location	Sample Size	Escapement [a]	Brood Year and Age Group								
			1989		1988			1987		1986	
			0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3
Coghill Lake	1,293	29,642	0.0	0.0	1.3	3.8	0.0	87.4	0.7	0.8	6.0
Eshamy Lake	1,211	36,237	1.3	0.8	0.0	92.6	0.5	2.3	2.4	0.0	0.1

[a] Weir counts.

Table 17. Prince William Sound coho salmon weekly catch and effort by the commercial common property fishery, by district and gear type, from fish ticket summaries, 1992.

Statistical Week	Dates	Purse Seine Fisheries														
		Eastern District			Northern District			Coghill District			Southwestern District			Unakwik District		
		Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch
24	06/07 – 06/13		Closed			Closed			Closed			Closed			Closed	
25	06/14 – 06/20		Closed			Closed			Closed			Closed		24	0	0
26	06/21 – 06/27		Closed			Closed			Closed			Closed		48	0	0
27	06/28 – 07/04		Closed			Closed			Closed			Closed		48	0	0
28	07/05 – 07/11	12	57	17		Closed			Closed			Closed		48	0	0
29	07/12 – 07/18	112	35	27		Closed			Closed			Closed		48	0	0
30	07/19 – 07/25	44	24	73		Closed			Closed			Closed		48	0	0
31	07/26 – 08/01		Closed		24	45	9	24	3	25	24	103	715	48	3	0
32	08/02 – 08/08		Closed		36	67	198	24	3	19	36	126	2,193	48	4	0
33	08/09 – 08/15		Closed		45	33	146	45	16	2,639	45	153	2,159	48	6	2
34	08/16 – 08/22		Closed		72	25	1,933	72	13	6,766	72	75	2,616	48	1	0
35	08/23 – 08/29		Closed			Closed		76	10	11,405	100	40	1,392	48	0	0
36	08/30 – 09/05	36	1	122		Closed		168	5	6,528	168	0	0	24	0	0
37	09/06 – 09/12		Closed			Closed			Closed		68	0	0		Closed	
38	09/13 – 09/19		Closed			Closed			Closed			Closed			Closed	
39	09/20 – 09/26		Closed			Closed			Closed			Closed			Closed	
Total		204	68	239	177	93	2,286	409	59	27,382	513	174	9,075	528	10	2

–Continued–

Table 17. (page 2 of 2)

Statistical Week	Dates	Gillnet Fisheries: Unakwik Drift Gillnet Hours	Unakwik Drift Gillnet Effort[a]	Unakwik Drift Gillnet Catch	Coghill Drift Gillnet Hours	Coghill Drift Gillnet Effort[a]	Coghill Drift Gillnet Catch	Eshamy Drift and Set Gillnet Hours	Eshamy Drift and Set Gillnet Effort[a]	Eshamy Drift and Set Gillnet Catch	Gillnet Total	Purse Seine Total	PWS Total Catch
24	06/07 – 06/13		Closed		24	13	0		Closed		0	0	0
25	06/14 – 06/20	24	0	0		Closed	0	72	117	3	3	0	3
26	06/21 – 06/27	48	1	0		Closed	0	72	233	12	12	0	12
27	06/28 – 07/04	48	7	0	36	211	12	60	363	27	39	0	39
28	07/05 – 07/11	48	0	0	24	108	18	60	345	110	128	17	145
29	07/12 – 07/18	48	2	0	24	137	69	48	306	155	224	27	251
30	07/19 – 07/25	48	4	5		Closed	0	12	97	1	6	73	79
31	07/26 – 08/01	48	5	2	24	41	152	96	76	30	184	749	933
32	08/02 – 08/08	48	2	0	24	46	664	100	75	147	811	2,410	3,221
33	08/09 – 08/15	48	2	6	45	38	2,122	168	72	536	2,664	4,946	7,610
34	08/16 – 08/22	48	0	0	72	37	6,423	168	55	667	7,090	11,315	18,405
35	08/23 – 08/29	48	0	0	72	67	19,489	168	36	394	19,883	12,797	32,680
36	08/30 – 09/05	24	0	0	168	82	38,986	168	12	144	39,130	6,650	45,780
37	09/06 – 09/12		Closed		168	76	16,900	168	2	30	16,930	0	16,930
38	09/13 – 09/19		Closed		168	17	1,687	168	2	3	1,690	0	1,690
39	09/20 – 09/26		Closed		168	5	372	168	0	0	372	0	372
40	09/27 – 10/03		Closed		168	0	0	168	0	0	0	0	0
Totals		528	16	13	1,185	345	86,894	1,864	405	2,259	89,166	38,984	128,150

[a] Number of permits reporting catches.

Table 18. Prince William Sound pink salmon weekly catch and effort by the commercial common property fishery, by district and gear type, from fish ticket summaries, 1992.

Statistical Week	Dates	Purse Seine Fisheries														
		Eastern District			Northern District			Coghill District			Southwestern District			Unakwik District		
		Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch
24	06/07 – 06/13		Closed			Closed			Closed			Closed			Closed	
25	06/14 – 06/20		Closed			Closed			Closed			Closed		24	0	0
26	06/21 – 06/27		Closed			Closed			Closed			Closed		48	0	0
27	06/28 – 07/04		Closed			Closed			Closed			Closed		48	0	0
28	07/05 – 07/11	12	57	143,201		Closed			Closed			Closed		48	0	0
29	07/12 – 07/18	112	35	240,552		Closed			Closed			Closed		48	0	0
30	07/19 – 07/25	44	24	104,990		Closed			Closed			Closed		48	0	0
31	07/26 – 08/01		Closed		24	45	215,959	24	3	3,165	24	103	295,185	48	3	5,170
32	08/02 – 08/08		Closed		36	67	601,903	24	3	3,507	36	126	964,096	48	4	3,433
33	08/09 – 08/15		Closed		45	33	203,028	45	16	53,165	45	153	887,590	48	6	4,599
34	08/16 – 08/22		Closed		72	25	103,935	72	13	52,294	72	75	696,046	48	1	62
35	08/23 – 08/29		Closed			Closed		76	10	64,211	100	40	196,858	48	0	0
36	08/30 – 09/05	36	1	485		Closed		168	5	20,161	168	0	0	24	0	0
37	09/06 – 09/12		Closed			Closed			Closed		68	0	0		Closed	
38	09/13 – 09/19		Closed			Closed			Closed			Closed			Closed	
39	09/20 – 09/26		Closed			Closed			Closed			Closed			Closed	
Total		204	68	489,228	177	93	1,124,825	409	59	196,503	513	174	3,039,775	528	10	13,264

–Continued–

Table 18. (page 2 of 2)

Statistical Week	Dates	Gillnet Fisheries: Unakwik Drift Gillnet Hours	Unakwik Drift Gillnet Effort[a]	Unakwik Drift Gillnet Catch	Coghill Drift Gillnet Hours	Coghill Drift Gillnet Effort[a]	Coghill Drift Gillnet Catch	Eshamy Drift and Set Gillnet Hours	Eshamy Drift and Set Gillnet Effort[a]	Eshamy Drift and Set Gillnet Catch	Gillnet Total	Purse Seine Total	PWS Total Catch
24	06/07 – 06/13		Closed		24	13	0		Closed		0	0	0
25	06/14 – 06/20	24	0	0		Closed	0	72	117	112	112	0	112
26	06/21 – 06/27	48	1	0		Closed	0	72	233	963	963	0	963
27	06/28 – 07/04	48	7	3	36	211	1,475	60	363	7,477	8,955	0	8,955
28	07/05 – 07/11	48	0	0	24	108	1,613	60	345	16,122	17,735	143,201	160,936
29	07/12 – 07/18	48	2	94	24	137	5,466	48	306	20,915	26,475	240,552	267,027
30	07/19 – 07/25	48	4	320		Closed	0	12	97	1,808	2,128	104,990	107,118
31	07/26 – 08/01	48	5	1,446	24	41	12,844	96	76	17,511	31,801	519,479	551,280
32	08/02 – 08/08	48	2	1,019	24	46	19,543	100	75	37,001	57,563	1,572,939	1,630,502
33	08/09 – 08/15	48	2	1,090	45	38	23,656	168	72	119,229	143,975	1,148,382	1,292,357
34	08/16 – 08/22	48	0	0	72	36	37,592	168	55	188,194	225,786	852,337	1,078,123
35	08/23 – 08/29	48	0	0	72	67	47,637	168	36	102,538	150,175	261,069	411,244
36	08/30 – 09/05	24	0	0	168	82	16,965	168	12	30,641	47,606	20,646	68,252
37	09/06 – 09/12		Closed		168	76	588	168	2	604	1,192	0	1,192
38	09/13 – 09/19		Closed		168	17	5	168	2	0	5	0	5
39	09/20 – 09/26		Closed		168	5	0	168	0	0	0	0	0
40	09/27 – 10/03		Closed		168	0	0	168	0	0	0	0	0
Totals		528	16	3,972	1,185	345	167,384	1,864	405	543,115	714,471	4,863,595	5,578,066

[a] Number of permits reporting catches.

Table 19. Estimated hatchery contributions to pink salmon in the commercial common property harvests, hatchery cost recovery harvests, hatchery brood stock escapements, and total return of pink salmon in Prince William Sound, 1992.

Hatchery	1991 Release	Commercial Common Property Catch [a]	Cost Recovery Sales Harvest [a]	Brood Stock Escapement [a b]	Total Return
Solomon Gulch [c]	131,295,093	380,251	1,240,324 [d]	238,503	1,859,078
Cannery Creek	141,519,850	1,041,373	306,132	168,864	1,516,369
Wally Noerenberg	214,941,068	1,322,054	442,702 [e]	230,590	1,995,346
Armin F. Koernig	115,762,047	1,602,127	637,090	151,923	2,391,140
Main Bay	N/A	N/A	N/A	N/A	N/A
Total	603,518,058	4,345,805	2,626,248	789,880	7,761,933

[a] Preliminary estimates based on recoveries of coded wire tags from hatchery released fish.

[b] Includes holding mortalities and excess fish.

[c] Includes Boulder Bay releases.

[d] Includes catches from Boulder Bay.

[e] Includes catches from Davis Lake.

Table 20. Prince William Sound chum salmon weekly catch and effort by the commercial common property fishery, by district and gear type, from fish ticket summaries, 1992.

Statistical Week	Dates	Purse Seine Fisheries														
		Eastern District			Northern District			Coghill District			Southwestern District			Unakwik District		
		Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch	Hours	Effort[a]	Catch
24	06/07 – 06/13		Closed			Closed			Closed			Closed			Closed	
25	06/14 – 06/20		Closed			Closed			Closed			Closed		24	0	0
26	06/21 – 06/27		Closed			Closed			Closed			Closed		48	0	0
27	06/28 – 07/04		Closed			Closed			Closed			Closed		48	0	0
28	07/05 – 07/11	12	57	716		Closed			Closed			Closed		48	0	0
29	07/12 – 07/18	112	35	2,776		Closed			Closed			Closed		48	0	0
30	07/19 – 07/25	44	24	1,966		Closed			Closed			Closed		48	0	0
31	07/26 – 08/01		Closed		24	45	4,586	24	3	87	24	103	3,676	48	3	49
32	08/02 – 08/08		Closed		36	67	6,418	24	3	110	36	126	3,158	48	4	48
33	08/09 – 08/15		Closed		45	33	2,661	45	16	476	45	153	1,206	48	6	21
34	08/16 – 08/22		Closed		72	25	784	72	13	837	72	75	361	48	1	1
35	08/23 – 08/29		Closed			Closed		76	10	88	100	40	58	48	0	0
36	08/30 – 09/05	36	1	0		Closed		168	5	5	168	0	0	24	0	0
37	09/06 – 09/12		Closed			Closed			Closed		68	0	0		Closed	
38	09/13 – 09/19		Closed			Closed			Closed			Closed			Closed	
39	09/20 – 09/26		Closed			Closed			Closed			Closed			Closed	
Total		204	68	5,458	177	93	14,449	409	59	1,603	513	174	8,459	528	10	119

–Continued–

Table 20. (Page 2 of 2)

Statistical Week	Dates	Gillnet Fisheries: Unakwik Drift Gillnet Hours	Unakwik Drift Gillnet Effort[a]	Unakwik Drift Gillnet Catch	Coghill Drift Gillnet Hours	Coghill Drift Gillnet Effort[a]	Coghill Drift Gillnet Catch	Eshamy Drift and Set Gillnet Hours	Eshamy Drift and Set Gillnet Effort[a]	Eshamy Drift and Set Gillnet Catch	Gillnet Total	Purse Seine Total	PWS Total Catch
24	06/07 - 06/13		Closed		24	13	4,087		Closed		4,087	0	4,087
25	06/14 - 06/20	24	0	0		Closed		72	117	5,811	5,811	0	5,811
26	06/21 - 06/27	48	1	0		Closed		72	233	12,812	12,812	0	12,812
27	06/28 - 07/04	48	7	12	36	211	109,717	60	363	14,368	124,097	0	124,097
28	07/05 - 07/11	48	0	0	24	108	22,834	60	345	10,919	33,753	716	34,469
29	07/12 - 07/18	48	2	8	24	137	36,957	48	306	8,601	45,566	2,776	48,342
30	07/19 - 07/25	48	4	48		Closed		12	97	85	133	1,966	2,099
31	07/26 - 08/01	48	5	21	24	41	4,005	96	76	1,071	5,097	8,398	13,495
32	08/02 - 08/08	48	2	2	24	46	2,146	100	75	824	2,972	9,734	12,706
33	08/09 - 08/15	48	2	3	45	38	1,101	168	72	790	1,893	4,364	6,257
34	08/16 - 08/22	48	0	0	72	36	1,297	168	55	308	1,605	1,983	3,588
35	08/23 - 08/29	48	0	0	72	67	202	168	36	64	266	146	412
36	08/30 - 09/05	24	0	0	168	82	70	168	12	16	86	5	91
37	09/06 - 09/12		Closed		168	76	16	168	2	0	16	0	16
38	09/13 - 09/19		Closed		168	17	1	168	2	0	1	0	1
39	09/20 - 09/26		Closed		168	5	0	168	0	0	0	0	0
40	09/27 - 10/03		Closed		168	0	0	168	0	0	0	0	0
Totals		528	16	94	1,185	345	182,433	1,864	405	55,669	238,195	30,088	268,283

[a] Number of permits reporting catches.

Table 21. Estimated age composition of chum salmon in Prince William Sound commercial common property purse seine and gillnet catches, 1992.

Gear Type or Fishery	District	Statistical Area	Sample Size	Total Catch	Percentage of Catch by Brood Year and Age Group				
					1989	1988	1987	1986	1985
					0.2	0.3	0.4	0.5	0.6
Purse Seine	Eastern	221	179	5,458	0.0	81.0	17.3	1.7	0.0
	Northern/Unakwik	222	1,070	14,568	1.7	87.5	10.2	0.6	0.0
	Southwestern	226	563	8,459	9.2	69.7	19.6	1.5	0.0
	Purse Seine Total		1,812	28,485	3.6	81.0	14.3	1.1	0.0
Drift Gillnet	Coghill[a]	223	1,576	182,433	0.8	77.6	20.8	0.8	0.0
Drift and Set Gillnet	Eshamy	225	1,610	55,669	0.9	57.1	29.7	12.1	0.2
	Gillnet Total		3,186	238,102	0.8	72.8	22.9	3.5	0.0
Fisheries Total			4,998	266,587	1.1	73.6	22.0	3.2	0.0

[a] Includes some catches from commercial common property purse seines.

Table 22. Estimated hatchery contributions to chum salmon in the commercial common property harvests, hatchery cost recovery harvests, hatchery brood stock escapements, and total chum salmon hatchery run to Prince William Sound, 1992.

Hatchery	Commercial Common Property Catch[a]	Cost Recovery Sales Harvest [b]	Brood Stock Escapement	Total Hatchery Run
Solomon Gulch	617	6,036	10,350 [c]	17,003
Cannery Creek	N/A	0	N/A	0
Wally Noerenberg	N/A	50,474	144,316 [b]	194,790
Armin F. Koernig	N/A	0	N/A	0
Main Bay	5,131	882	N/A	6,013
Total	5,748	57,392	154,666	217,806

[a] Preliminary estimates based on recoveries of coded wire tags from hatchery released fish.

[b] Does not include brood stock carcass sales. Data are from fish ticket information.

[c] Includes holding mortalities, excess fish, and carcasses from fish used for brood stock that are also sold for cost recovery.

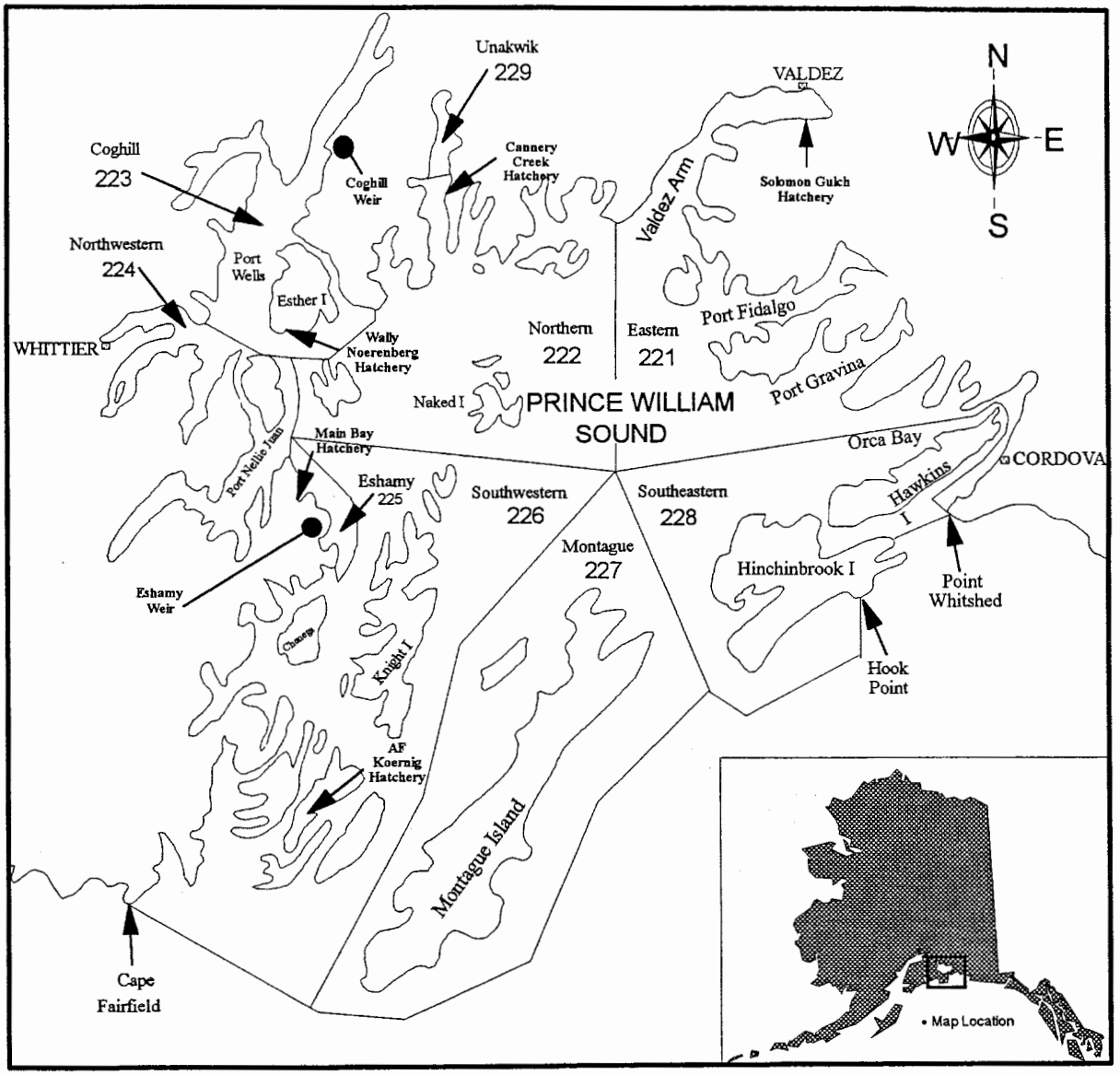


Figure 1. Prince William Sound area showing commercial fishing districts, hatcheries, and weir locations.

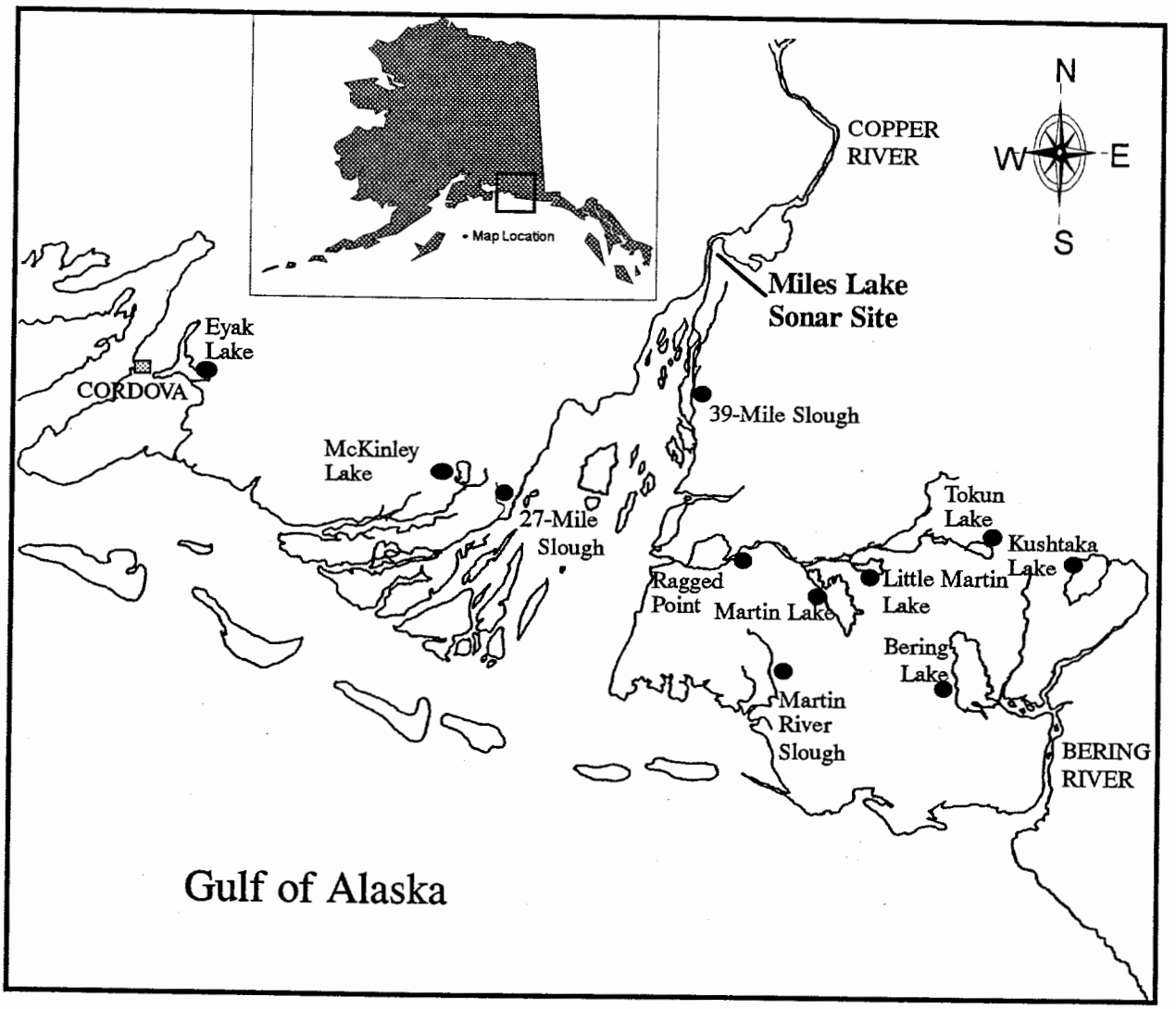


Figure 2. The Copper/Bering River area and the major coastal spawning areas which contribute to the commercial salmon fisheries.

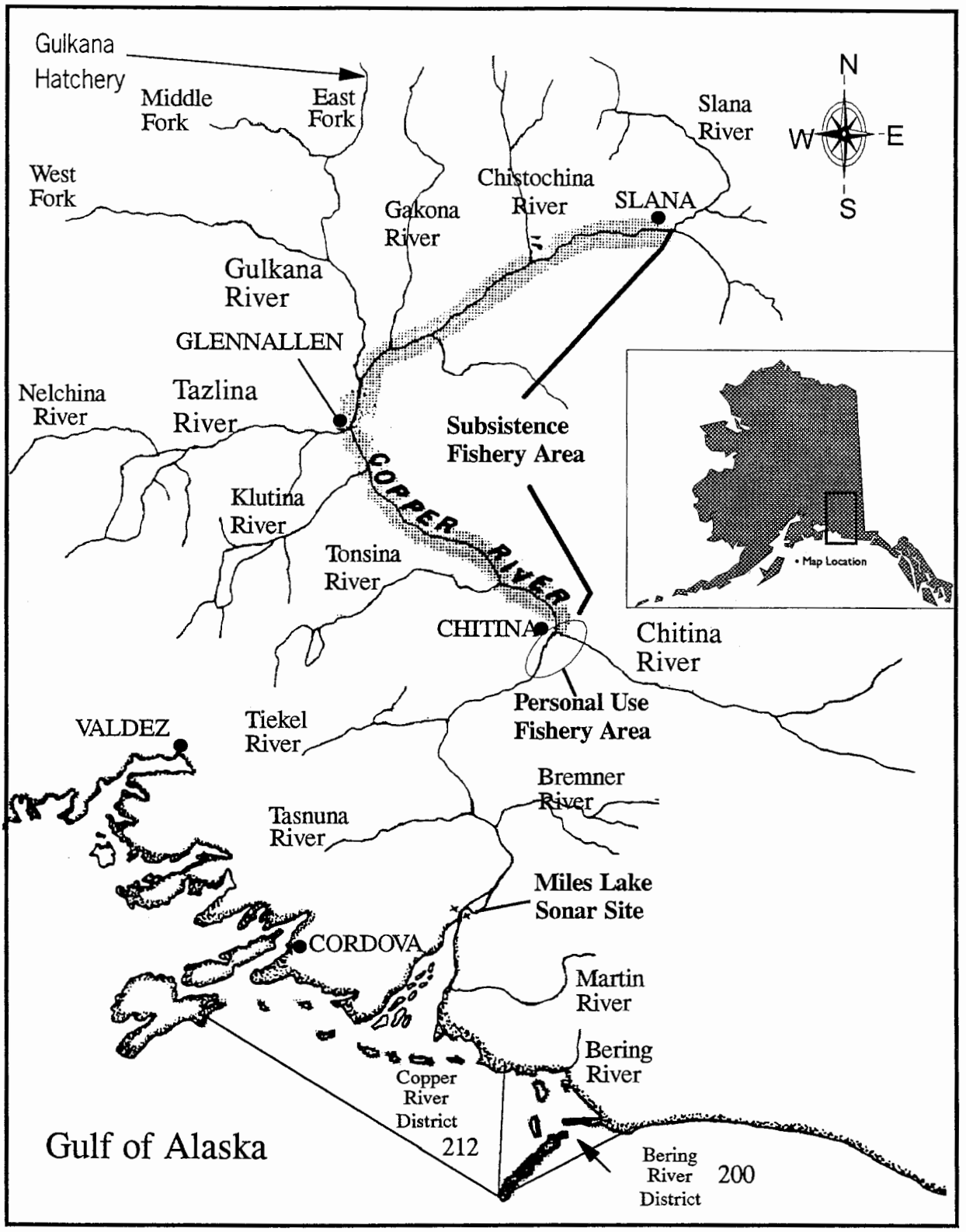


Figure 3. The location of the personal-use fishery near Chitina and the subsistence fishery which extends from Chitina to Slana along the upper Copper River.

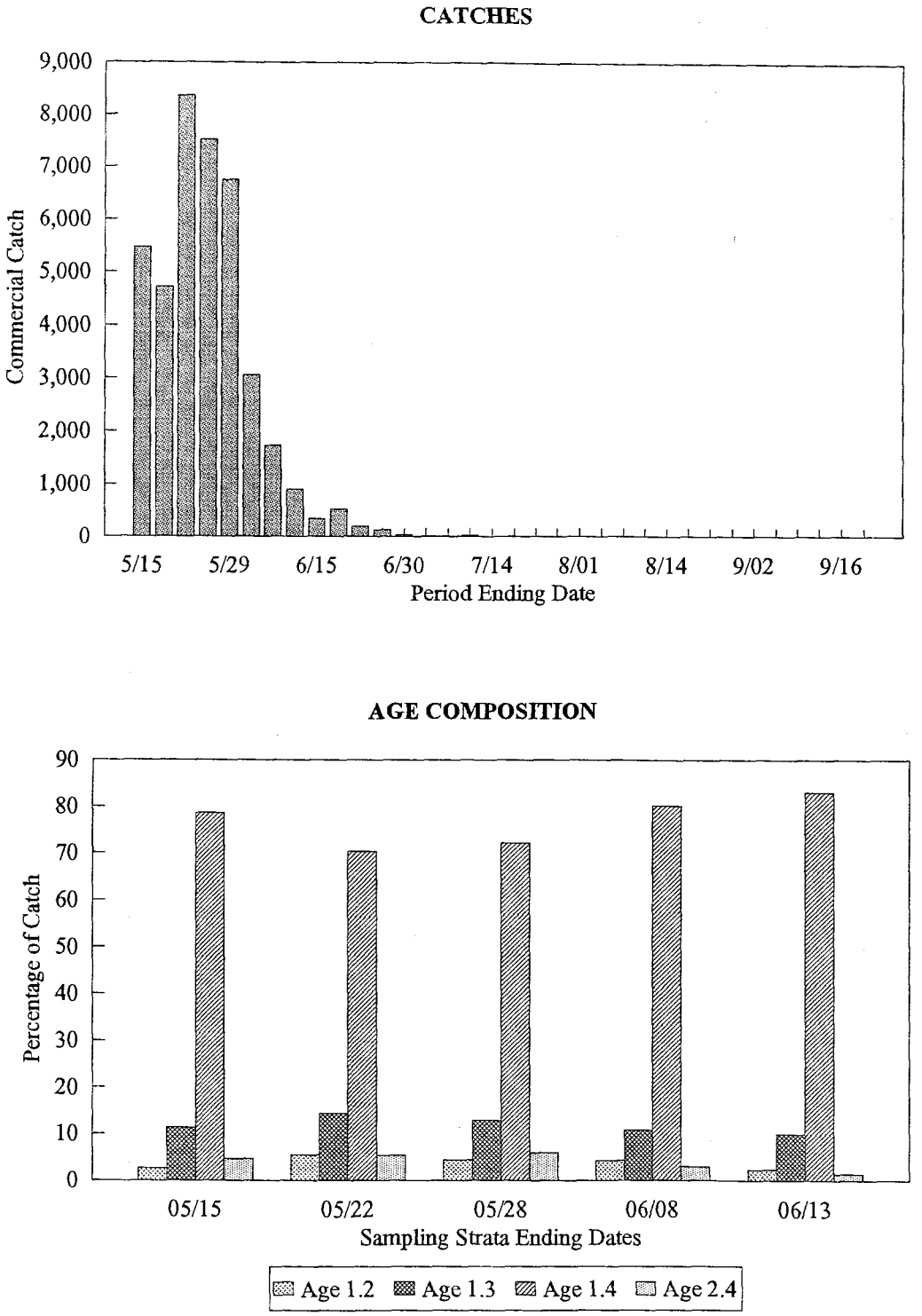


Figure 4. Chinook salmon catches by period and the temporally stratified age composition of those catches from the commercial common property drift gillnet fishery of the Copper River District, 1992.

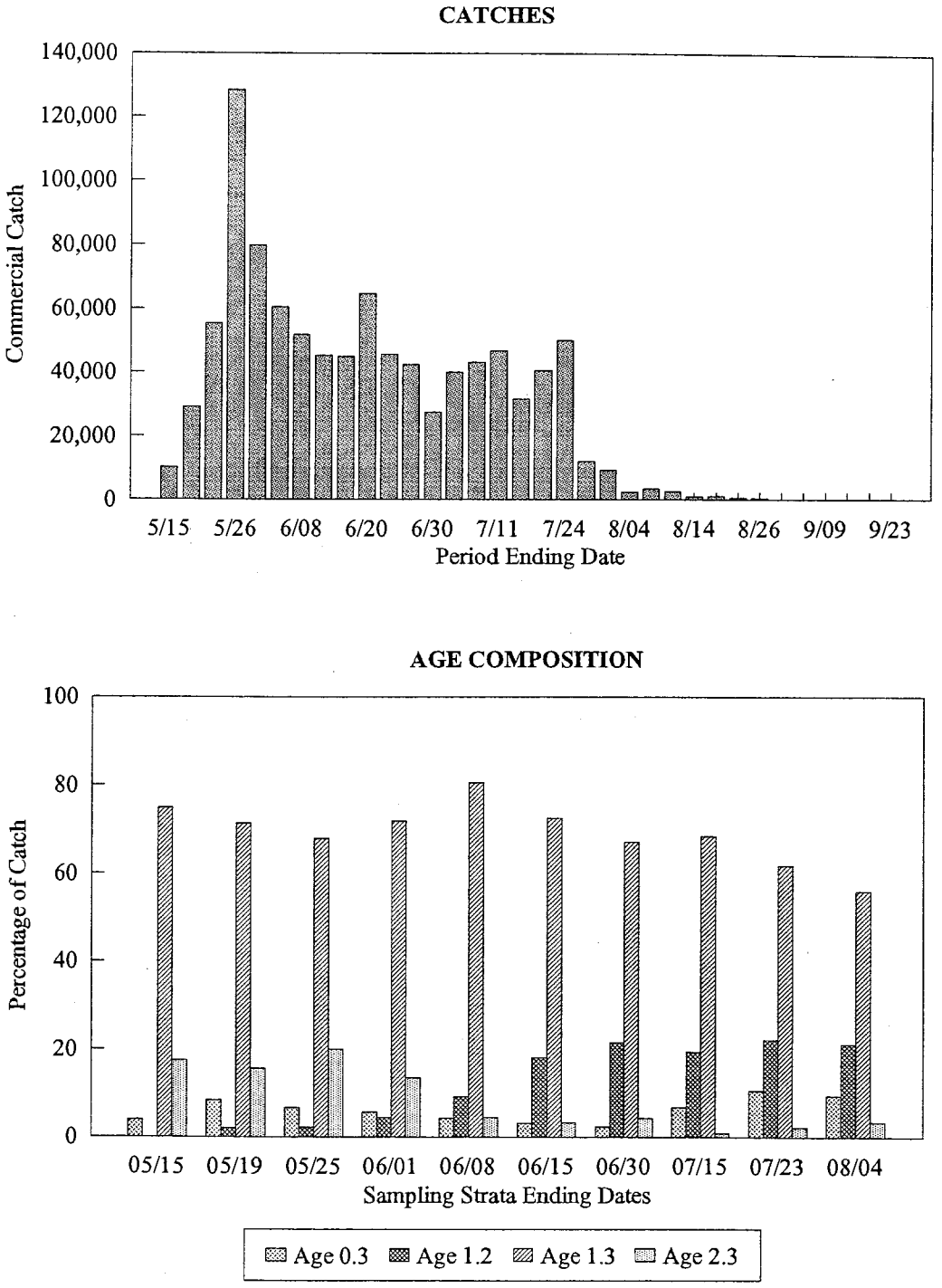


Figure 5. Sockeye salmon catches by period and the temporally stratified age composition of those catches from the commercial common property drift gillnet fishery in the Copper River District, 1992.

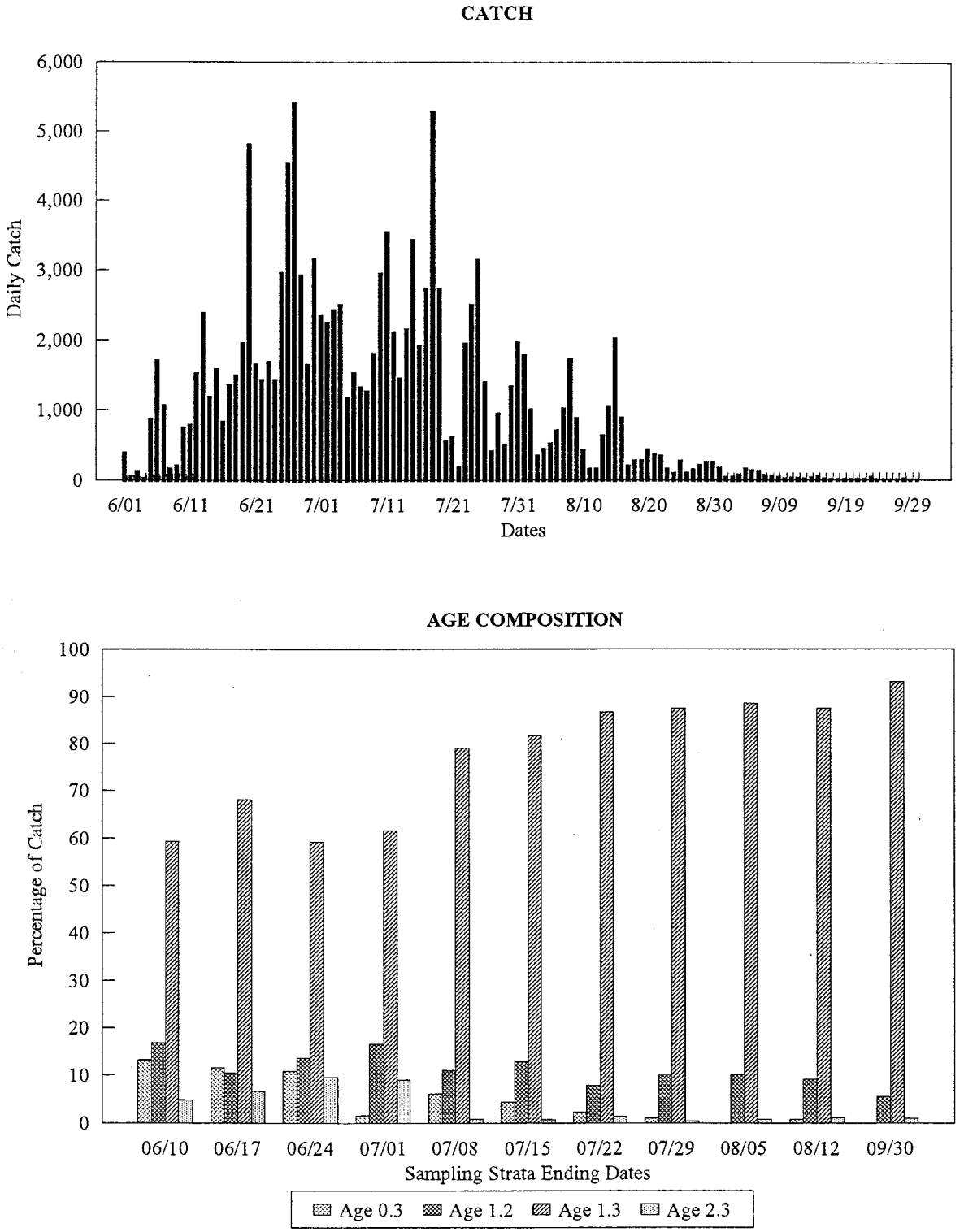


Figure 6. Daily catches of sockeye salmon in the combined personal-use and subsistence fisheries from the upper Copper River and the temporally stratified age composition of those catches, 1992.

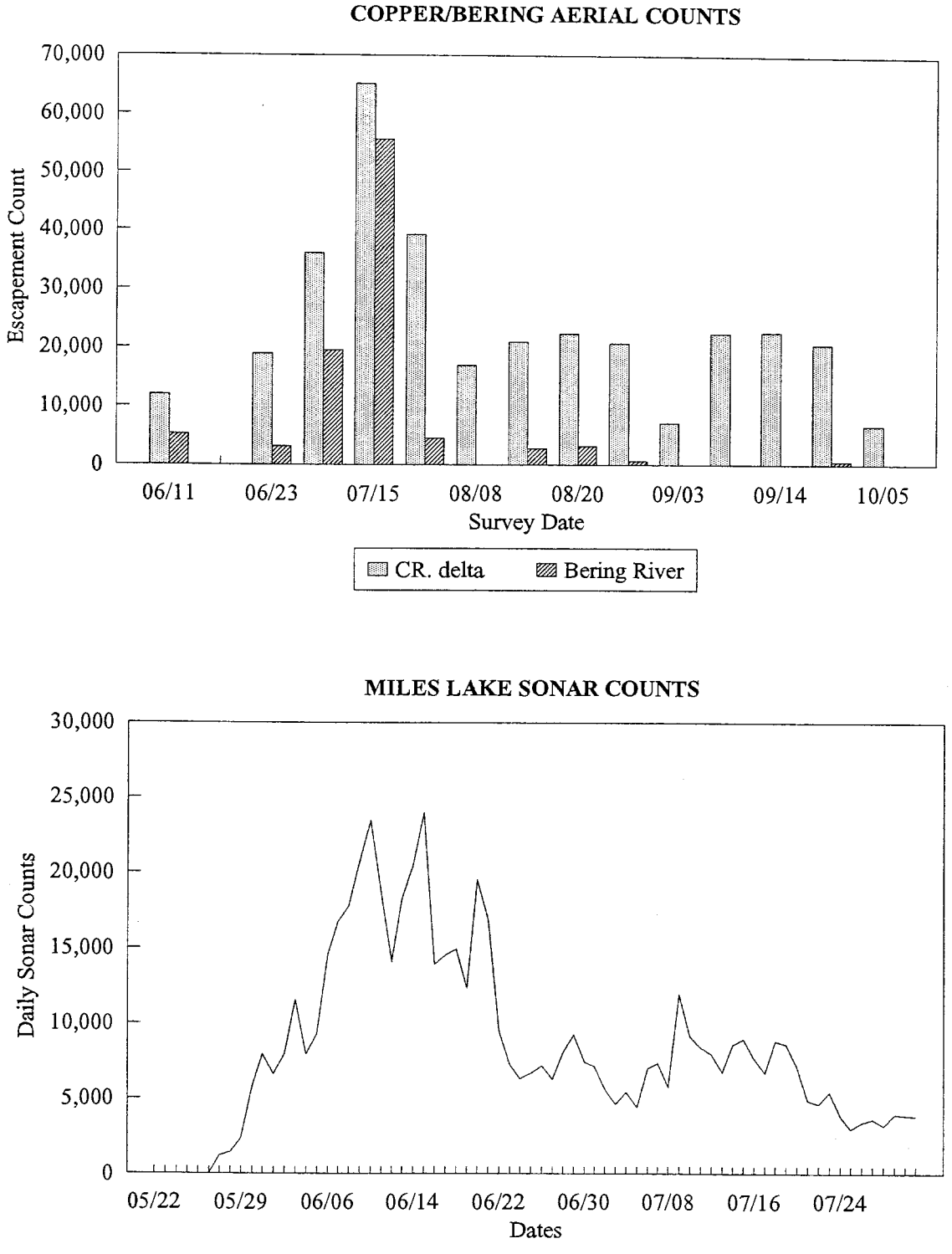


Figure 7. Aerial escapement counts of sockeye salmon runs to the Copper River delta and the Bering River area by survey date and the daily escapement estimates from the Miles Lake sonar, 1992.

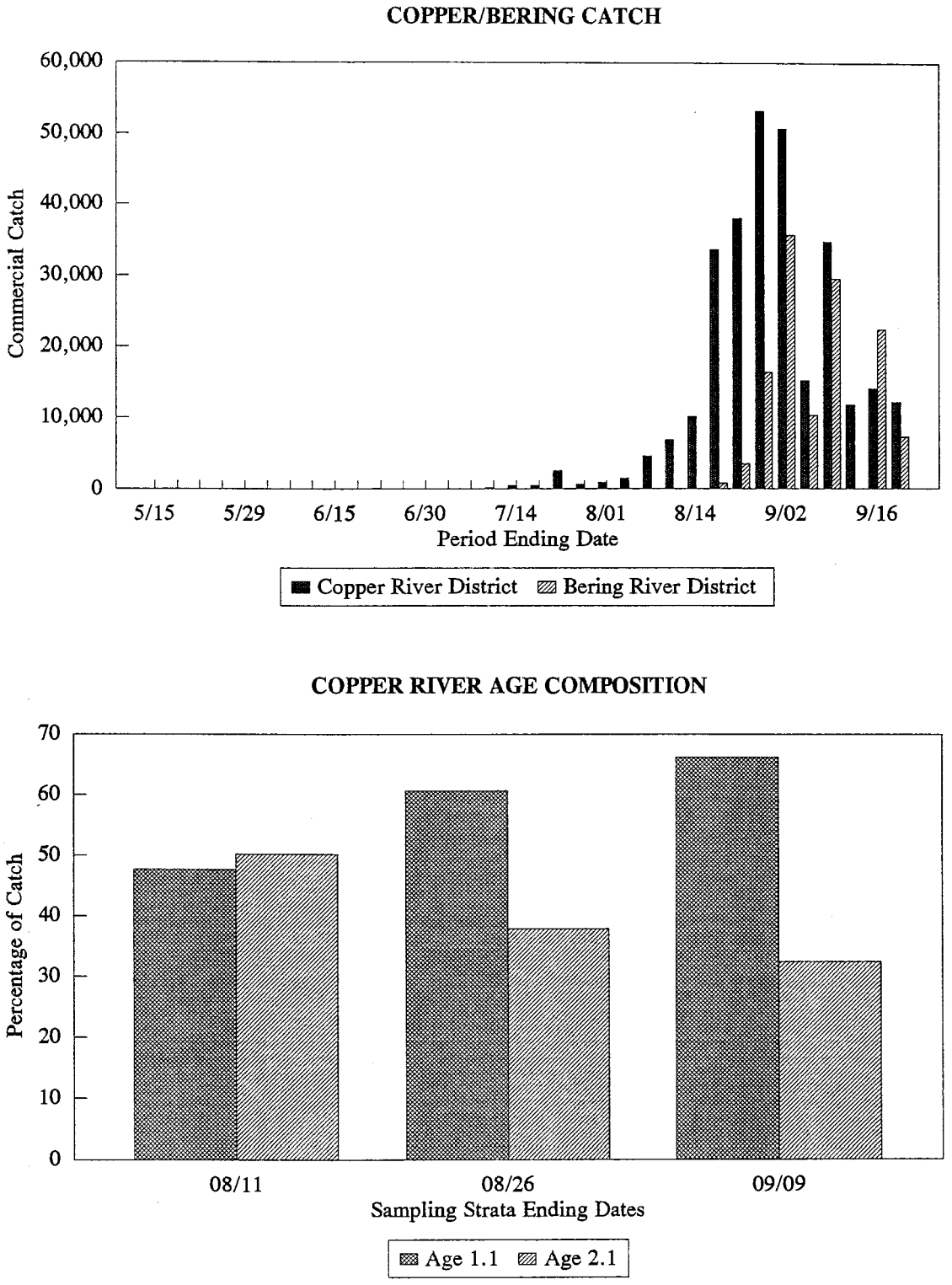


Figure 8. Coho salmon catches by period from the commercial common property drift gillnet fisheries of the Copper and Bering River Districts and the temporally stratified age composition of the Copper River District commercial common property catch, 1992.

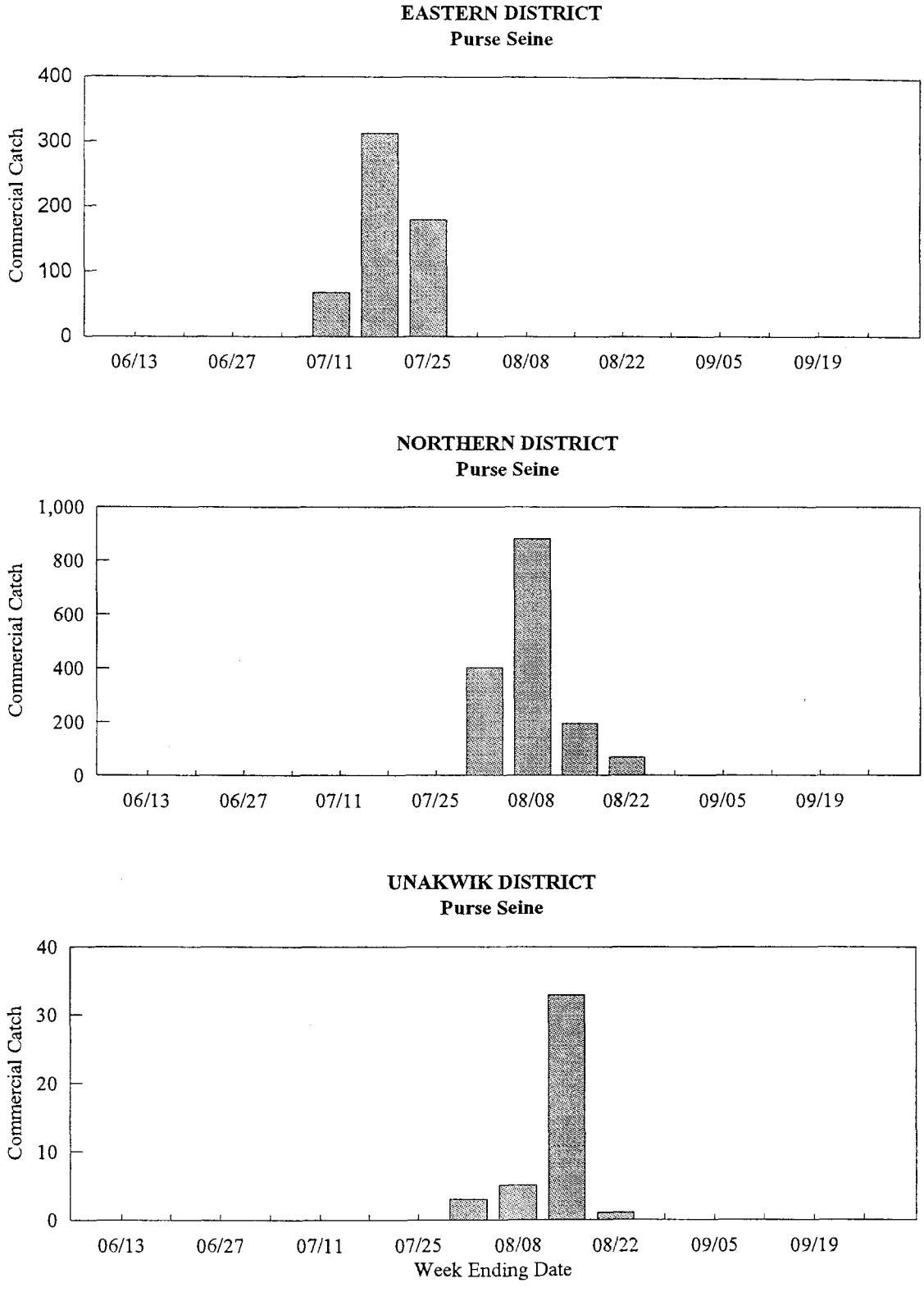


Figure 9. Weekly sockeye salmon catches from the major commercial common property purse seine, drift and set gillnet fisheries, Prince William Sound, 1992.

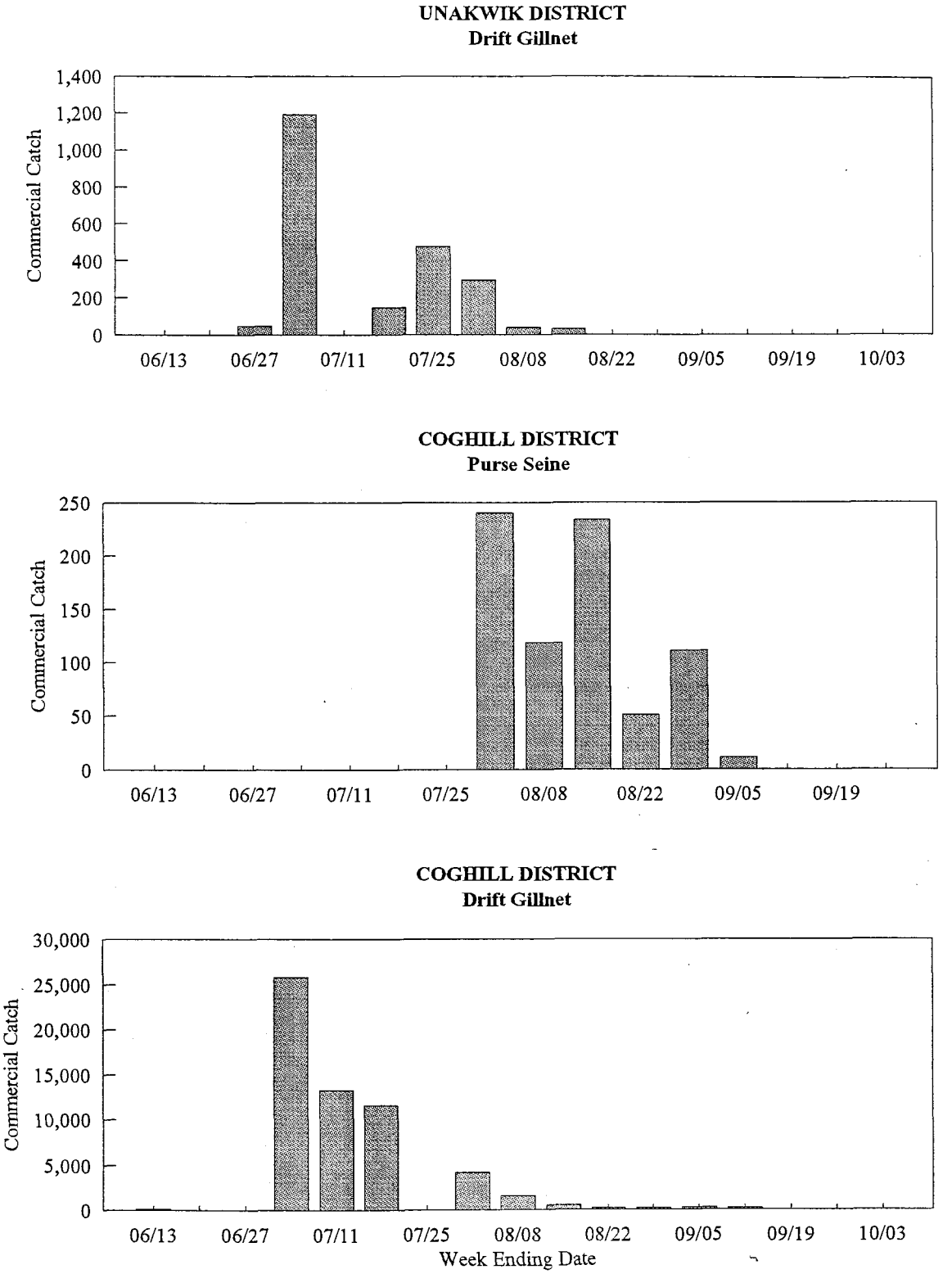


Figure 9. (Page 2 of 3)

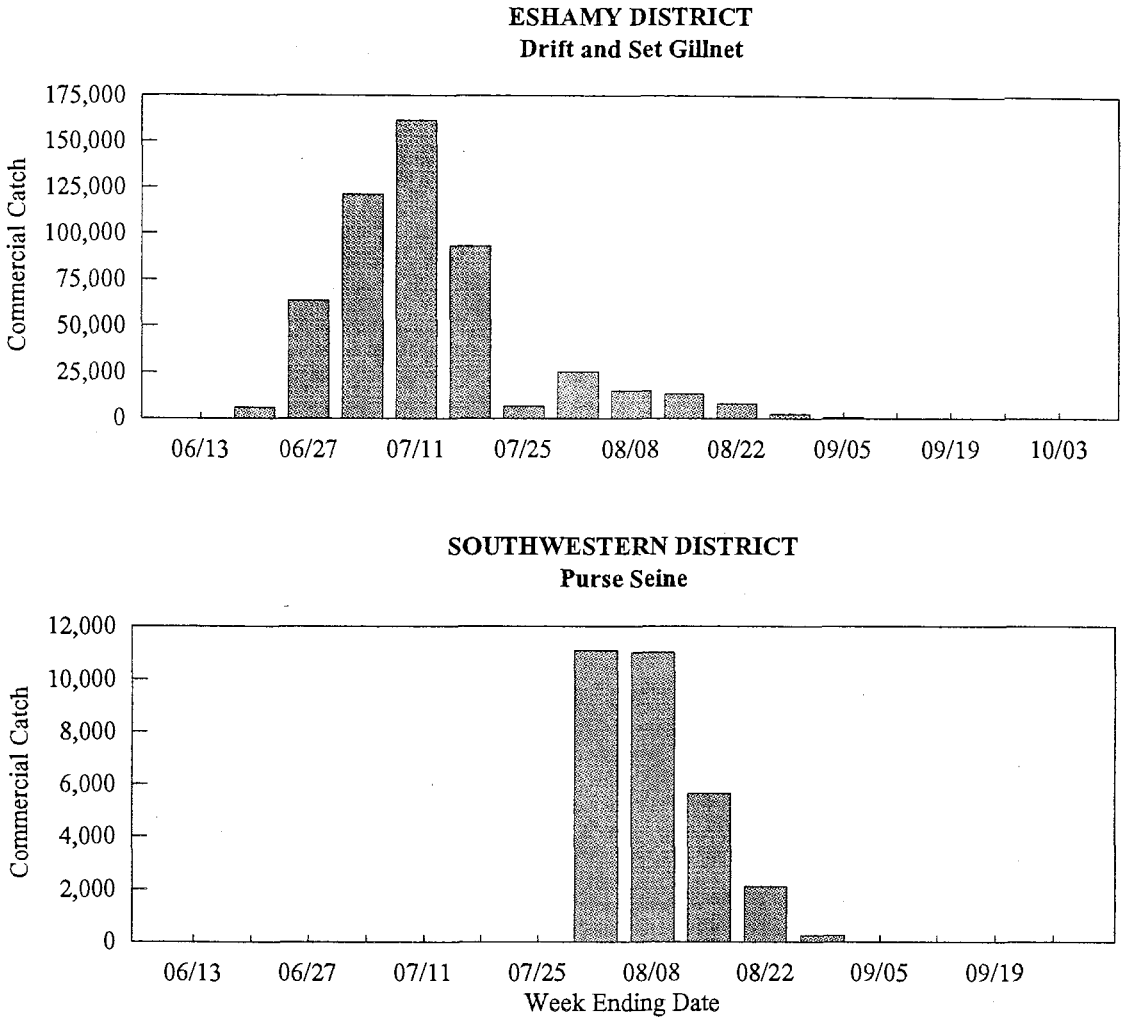


Figure 9. (Page 3 of 3)

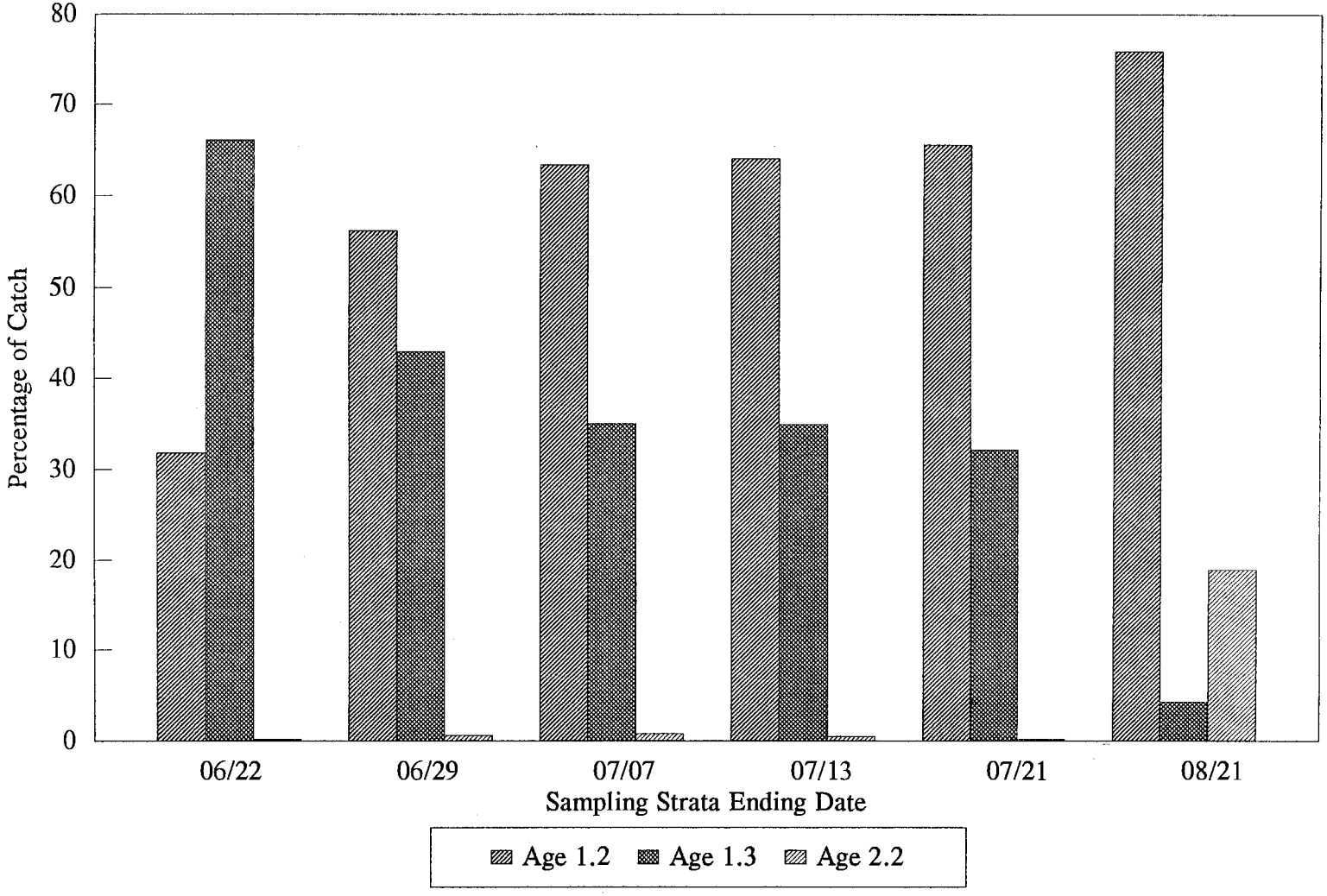


Figure 10. Temporally stratified age composition of sockeye salmon from the Eshamy District commercial common property gillnet fishery, 1992.

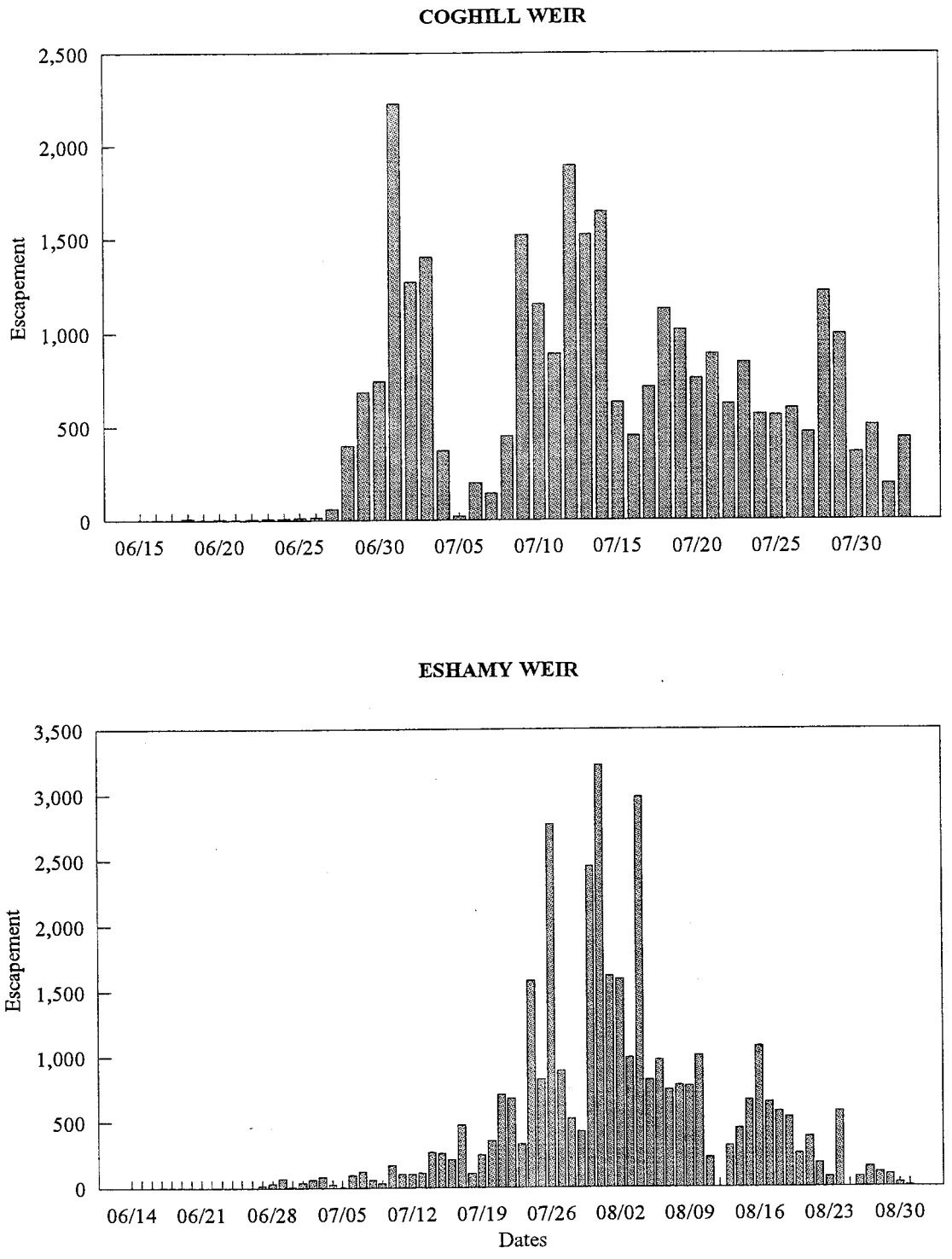


Figure 11. Daily sockeye salmon escapement through the weirs at Coghill Lake and Eshamy Lagoon, Prince William Sound, 1992.

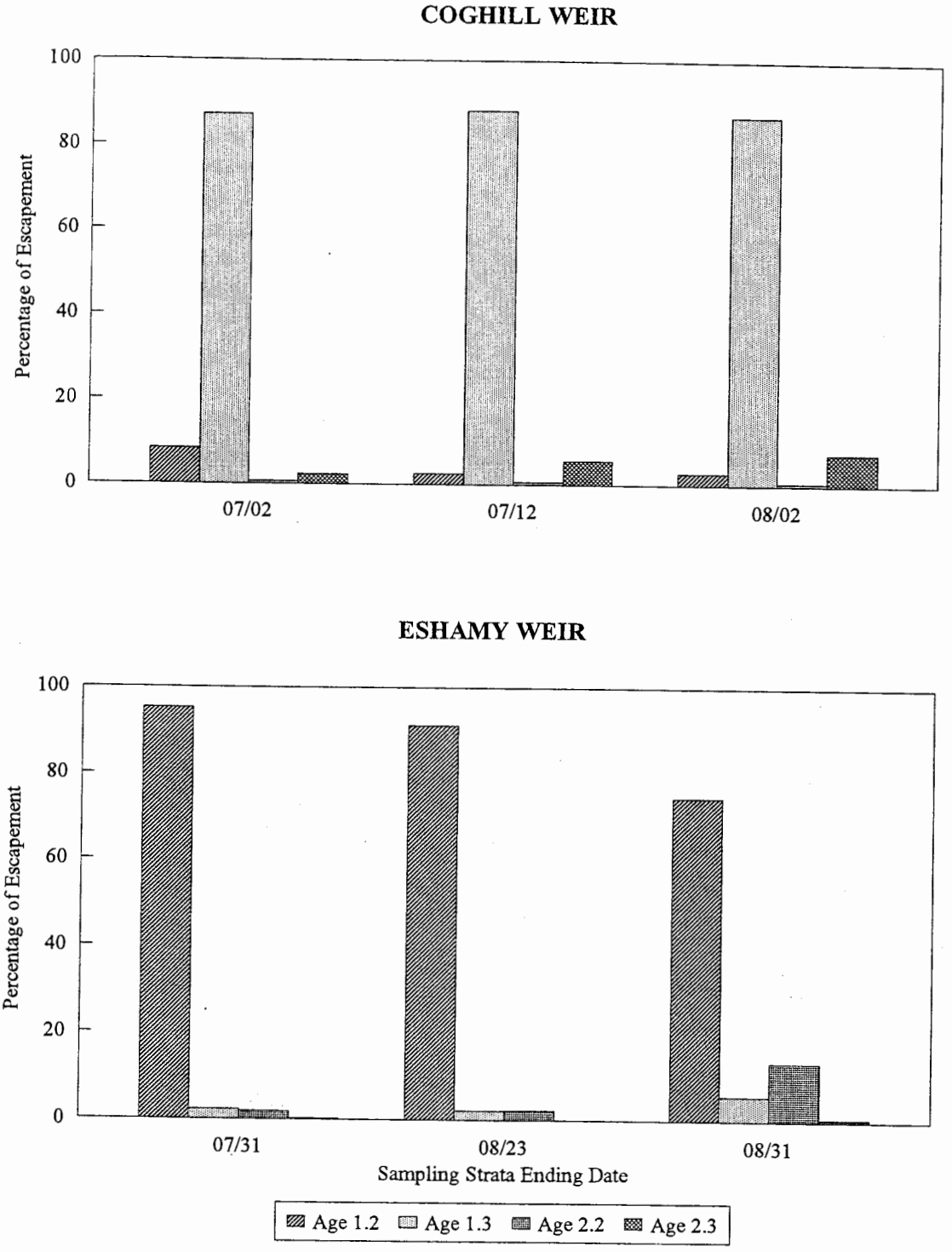


Figure 12. Temporally stratified age composition of sockeye salmon escapement through the weirs at Coghill Lake and Eshamy Lagoon, Prince William Sound, 1992.

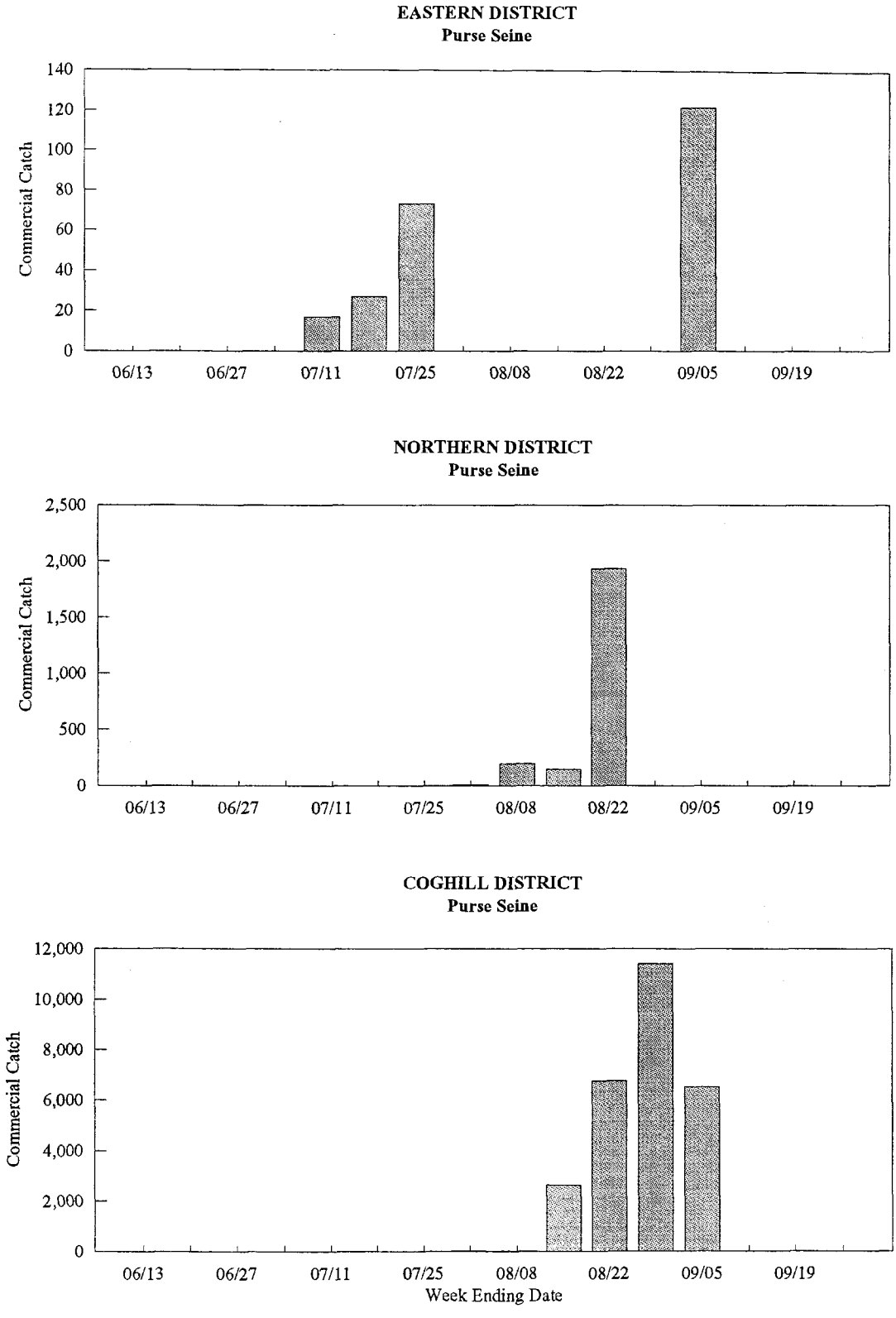


Figure 13. Weekly coho salmon catches from the major commercial common property purse seine, drift gillnet, and set gillnet fisheries in Prince William Sound, 1992.

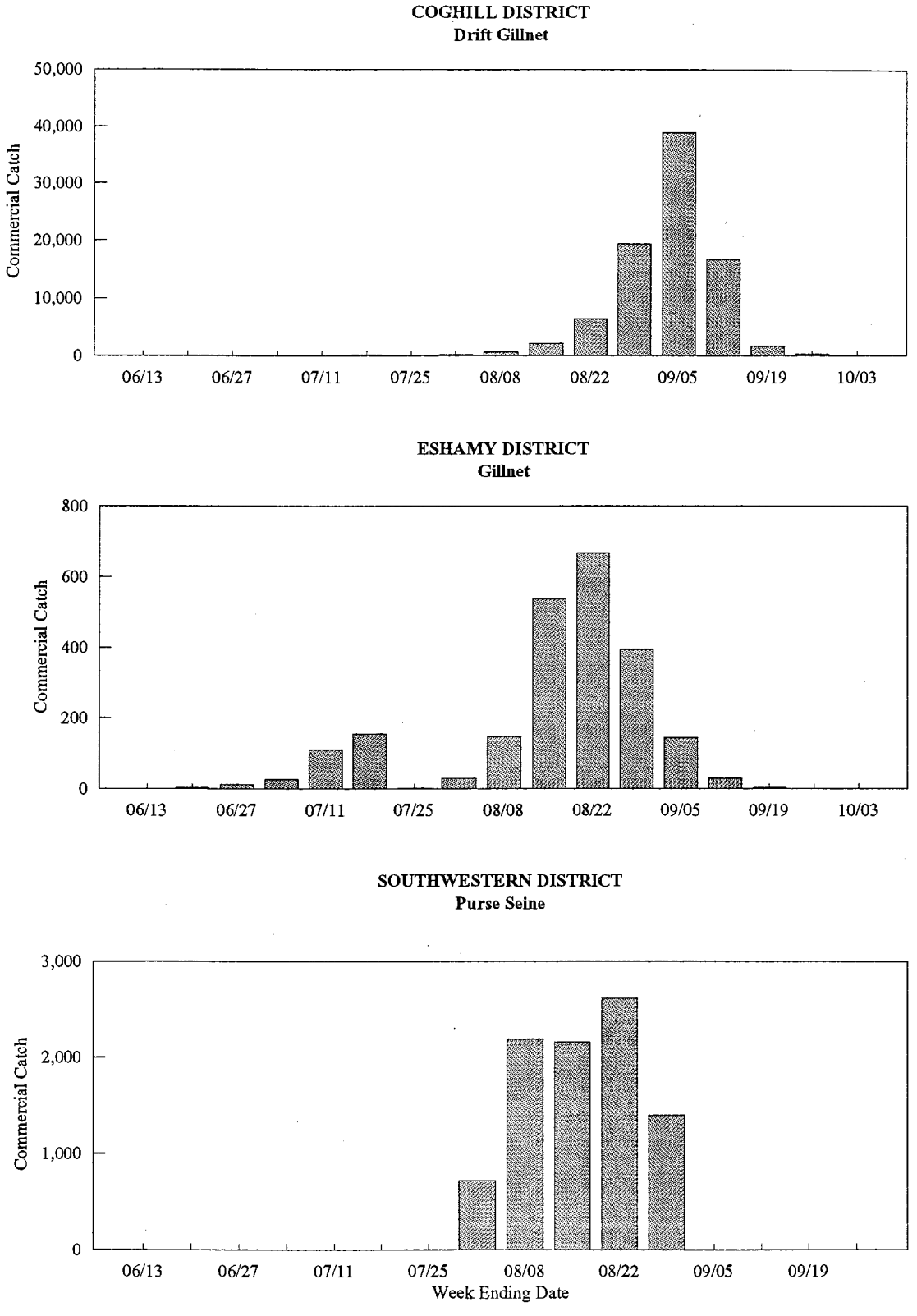


Figure 13. (Page 2 of 2)

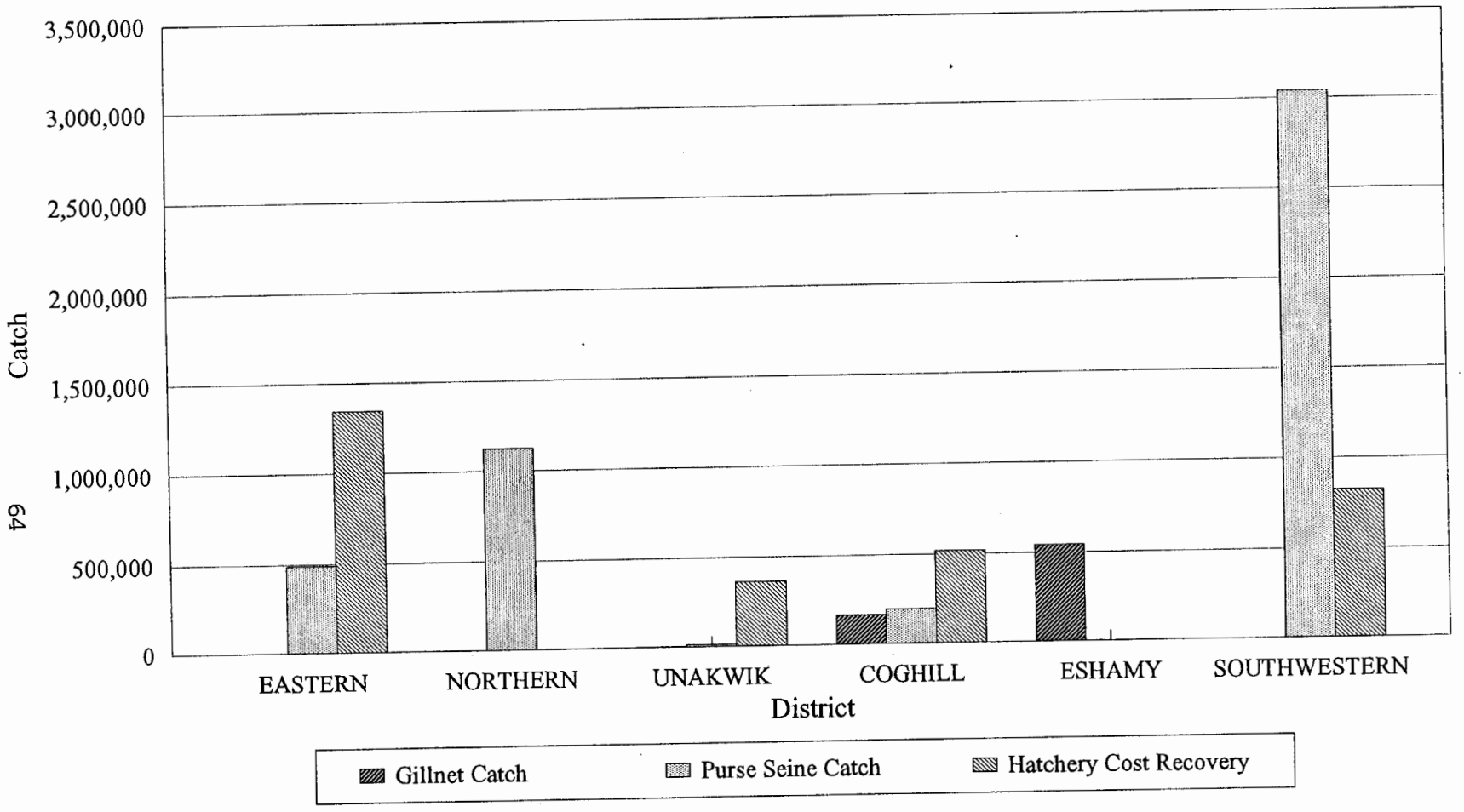


Figure 14. Purse seine and gillnet commercial common propery harvests and hatchery cost recovery harvests of pink salmon in Prince William Sound by district, 1992.

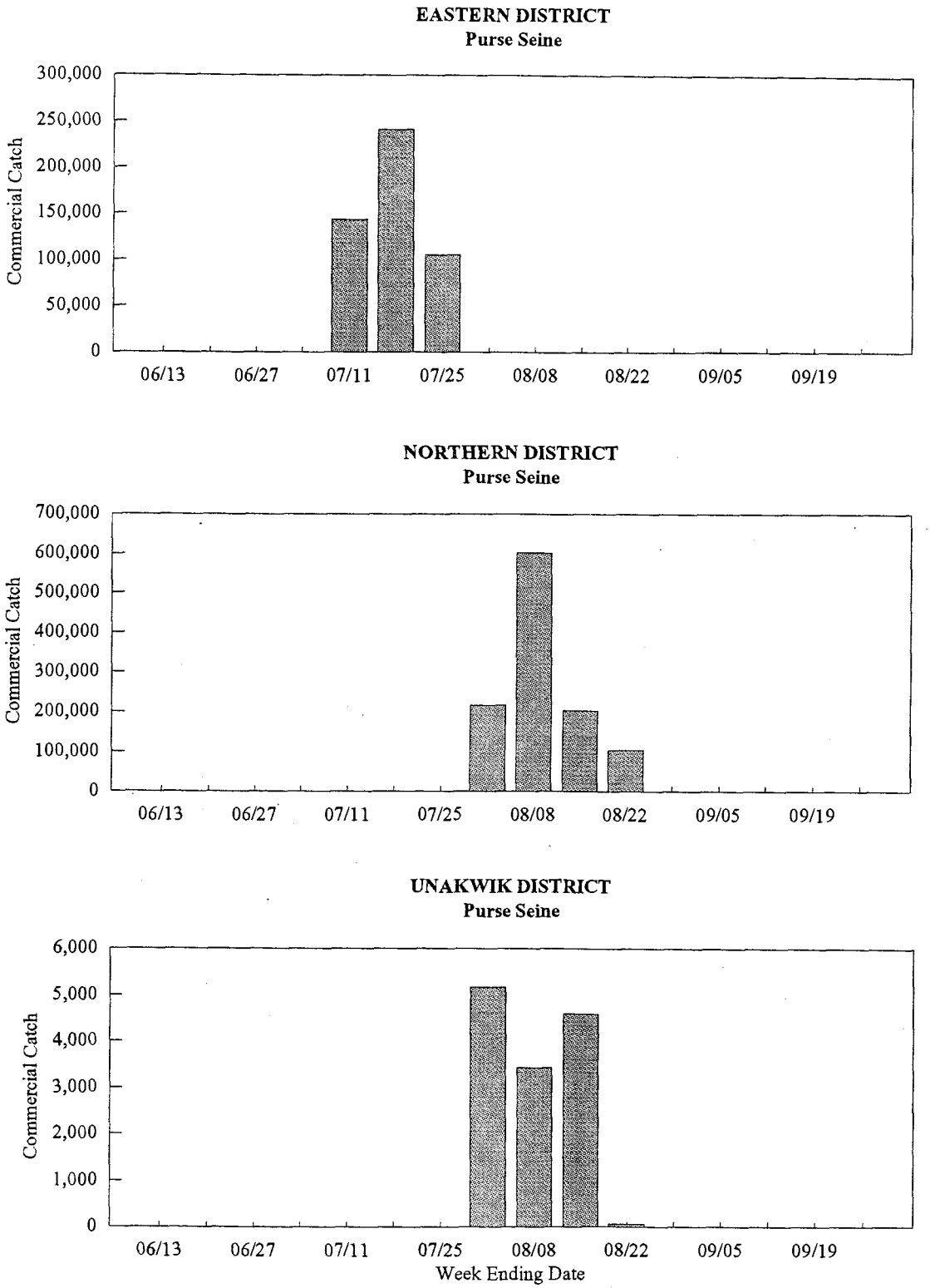
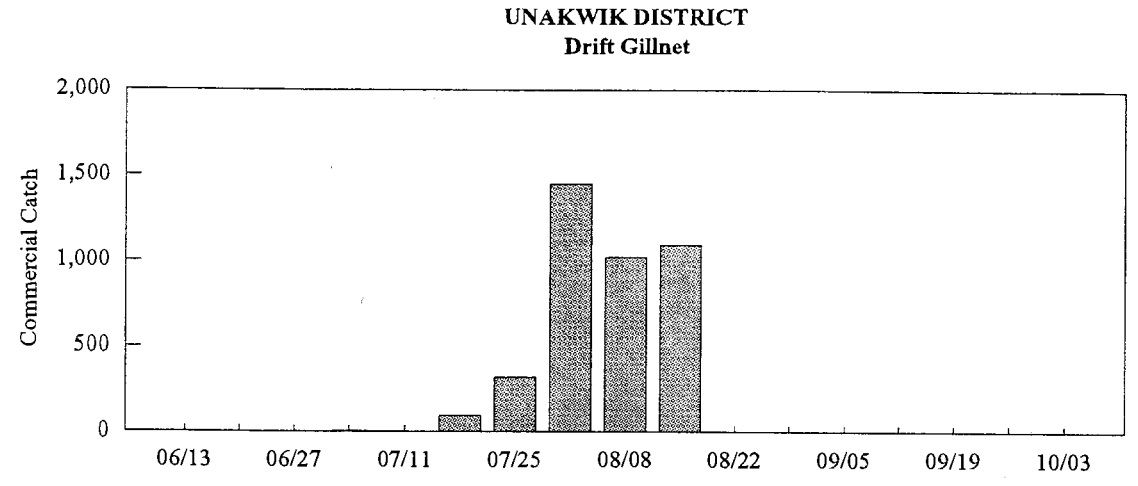
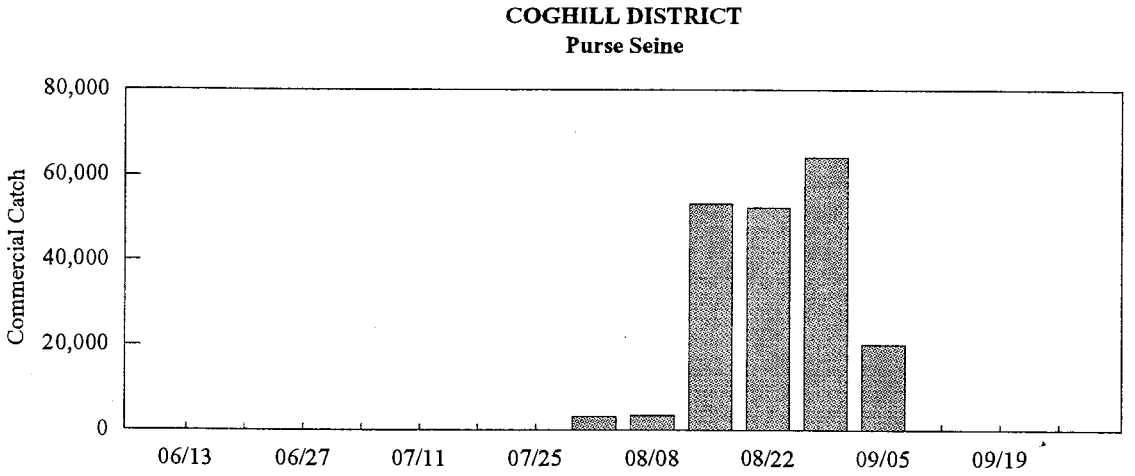


Figure 15. Weekly pink salmon catches from the major commercial common property purse seine, drift gillnet, and set gillnet fisheries in Prince William Sound by district, 1992.





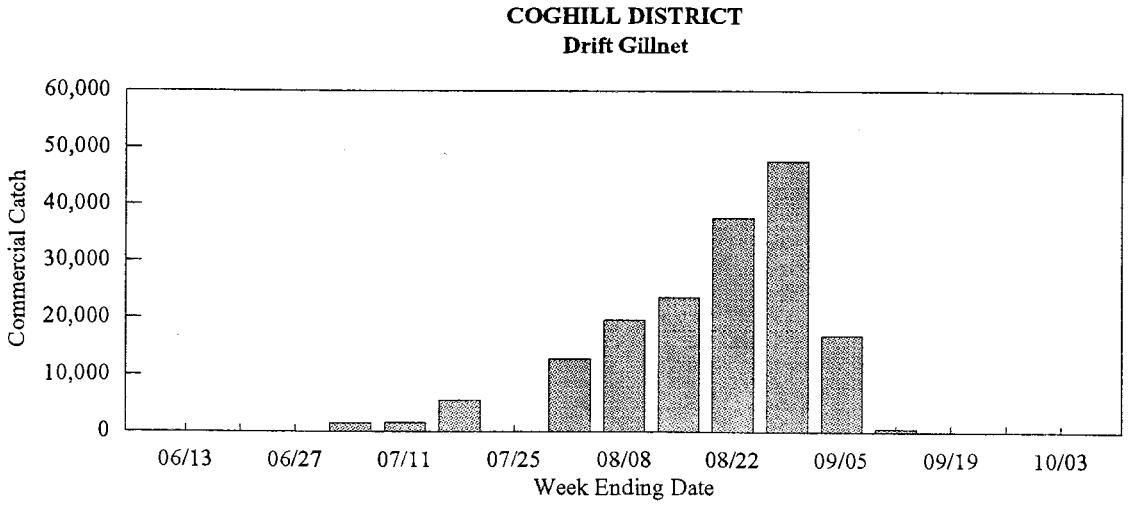


Figure 15. (Page 2 of 3)

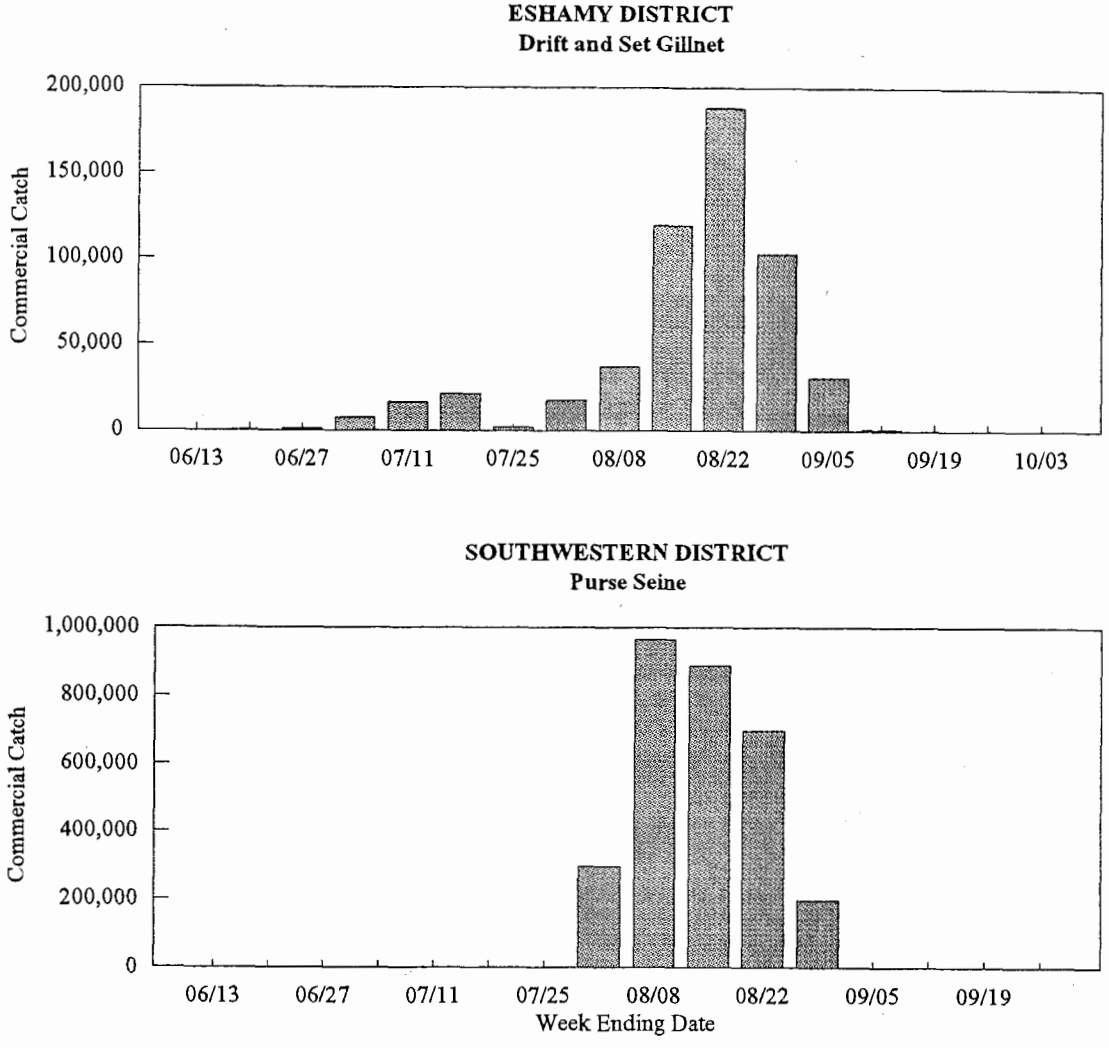


Figure 15. (Page 3 of 3)

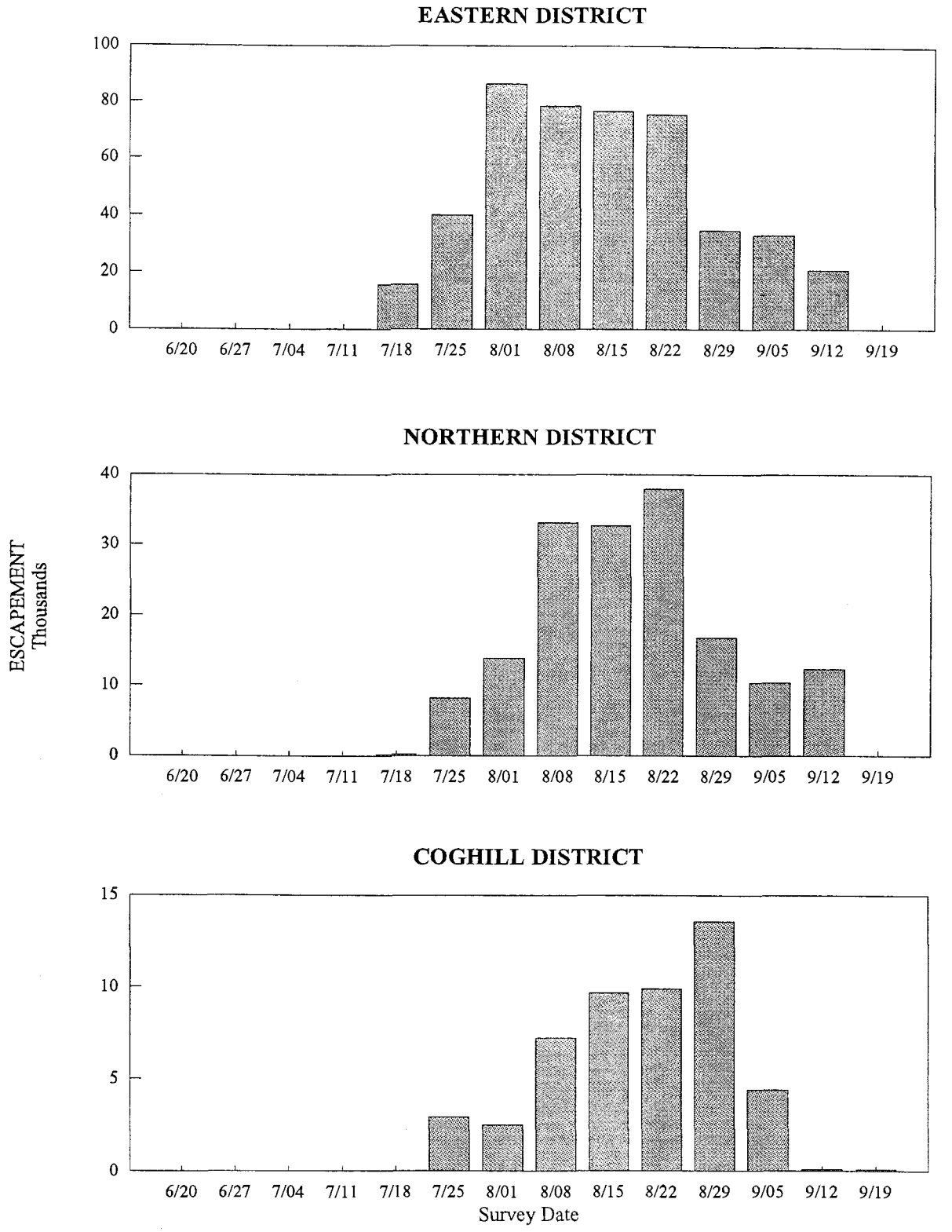


Figure 16. Weekly aerial escapement estimates of wild pink salmon to Prince William Sound by district, 1992.

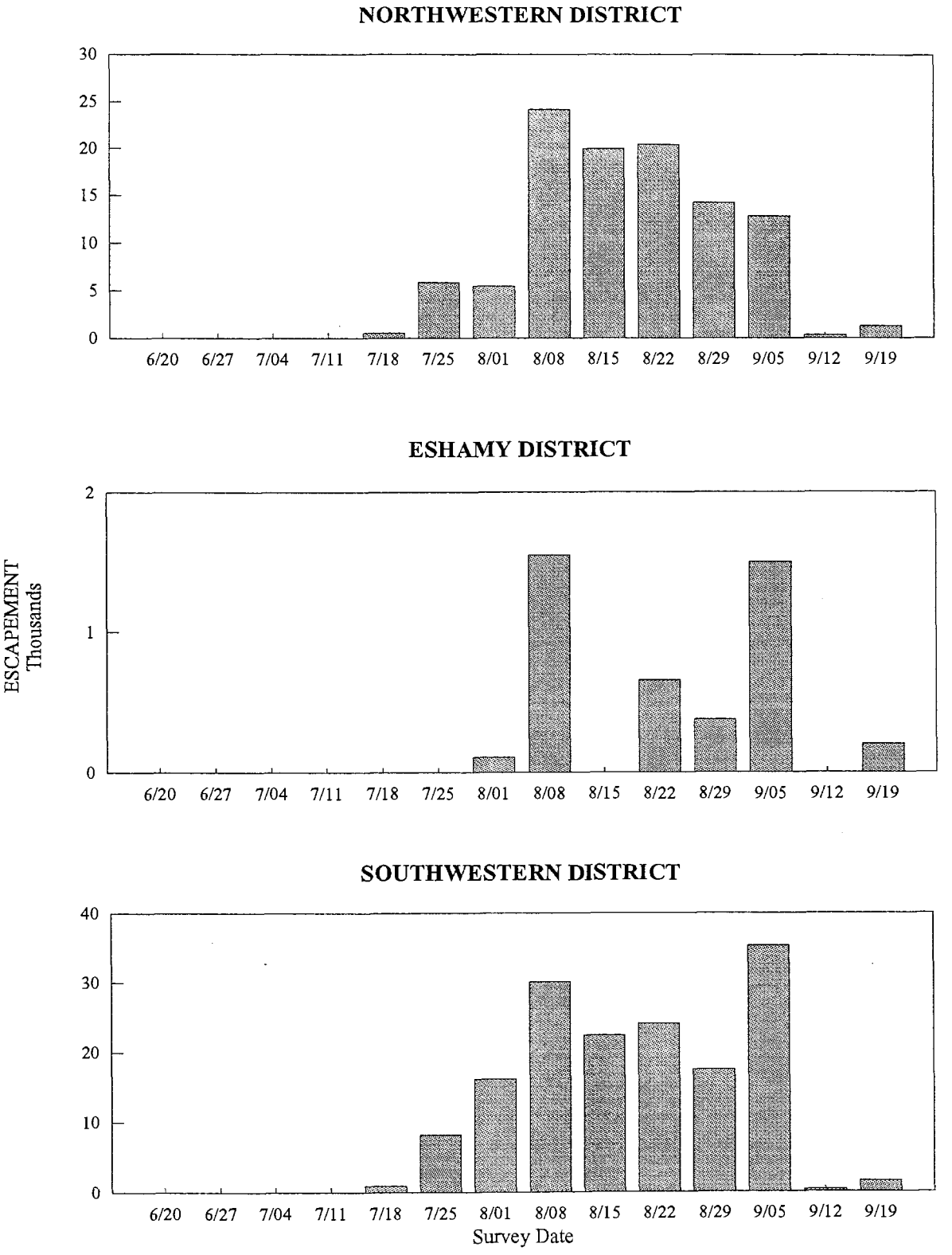


Figure 16. (Page 2 of 3)

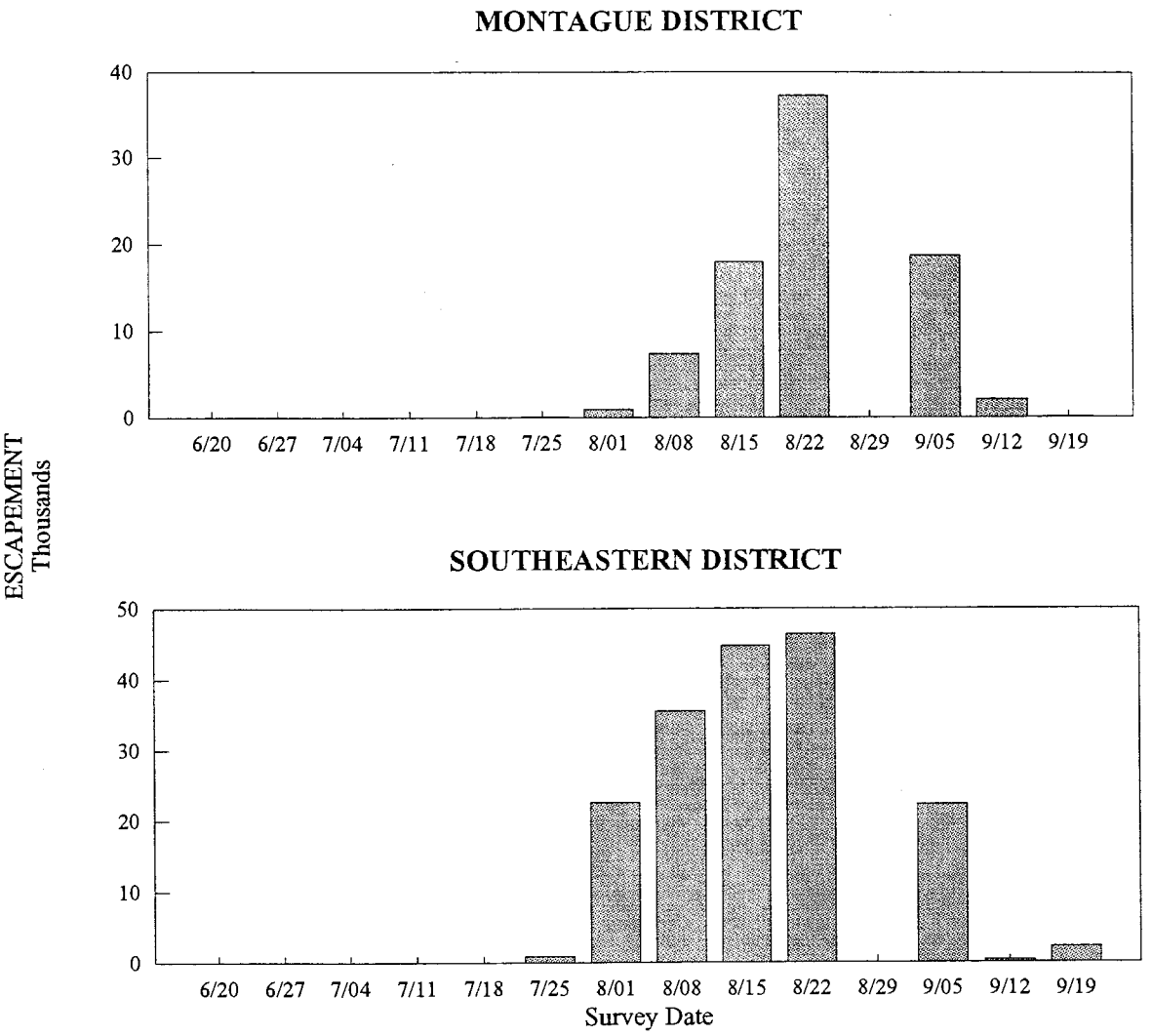


Figure 16. (Page 3 of 3)

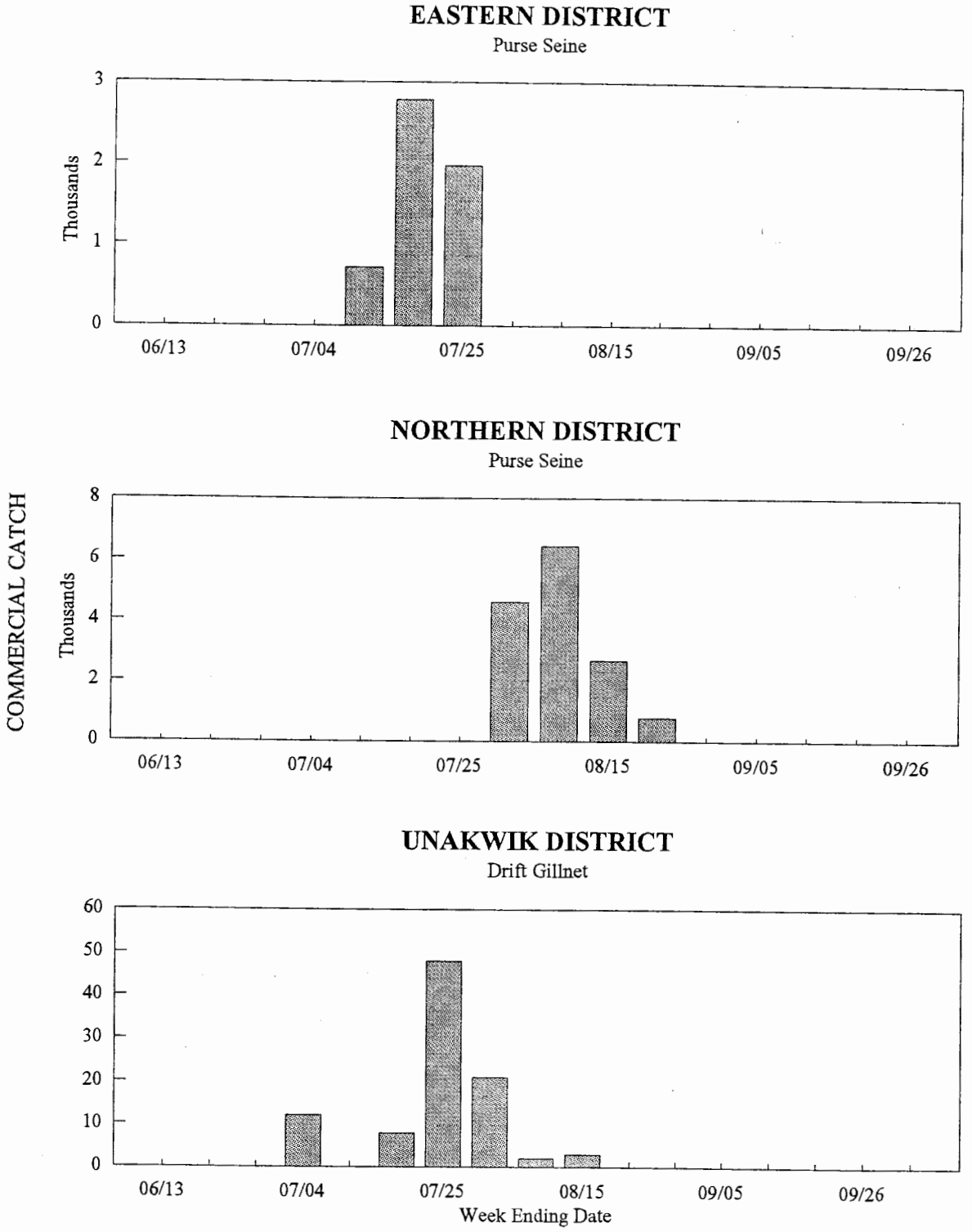


Figure 17. Weekly chum salmon catches from the major commercial common property purse seine, drift gillnet, and set gillnet fisheries in Prince William Sound by district, 1992.

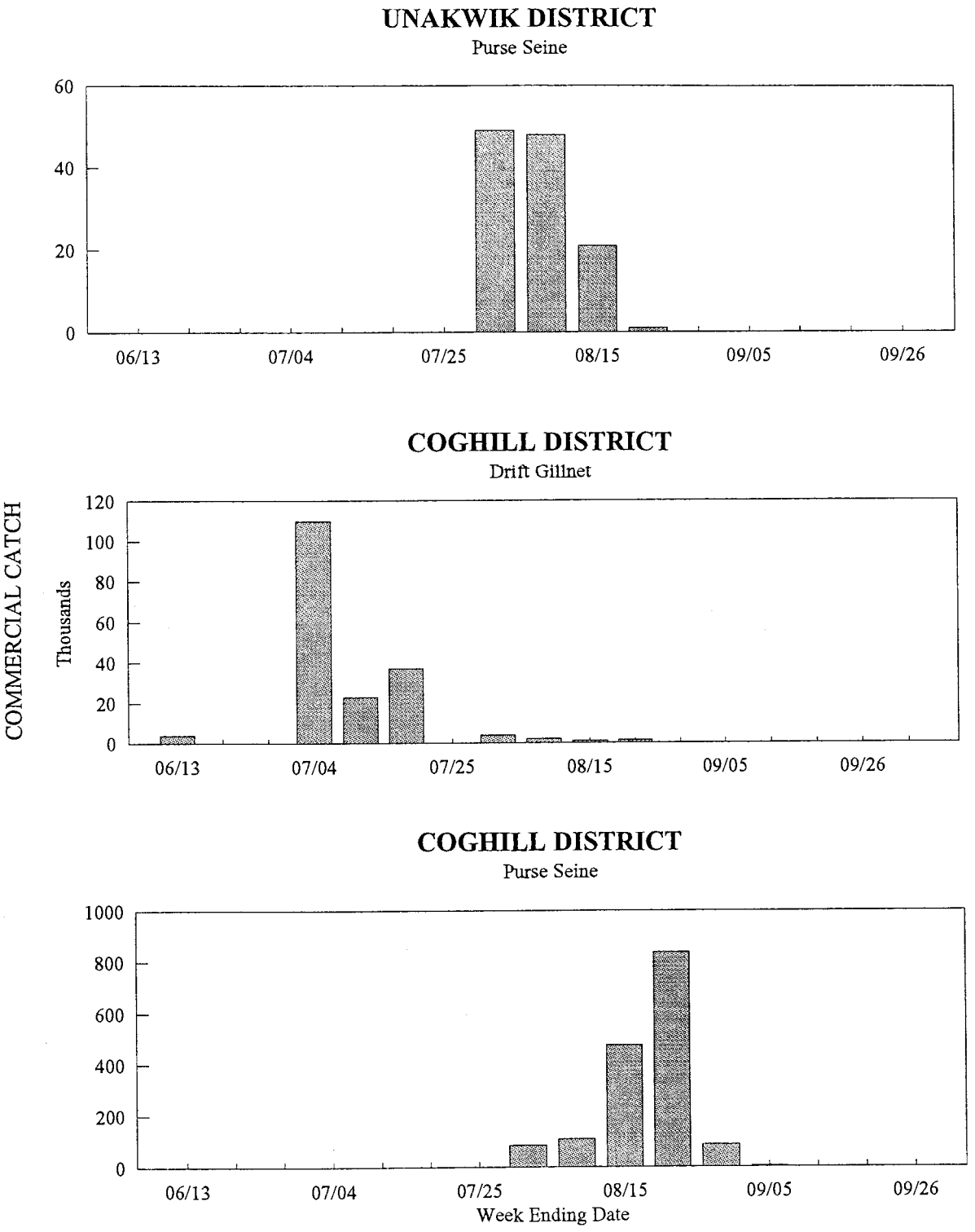


Figure 17. (Page 2 of 3)

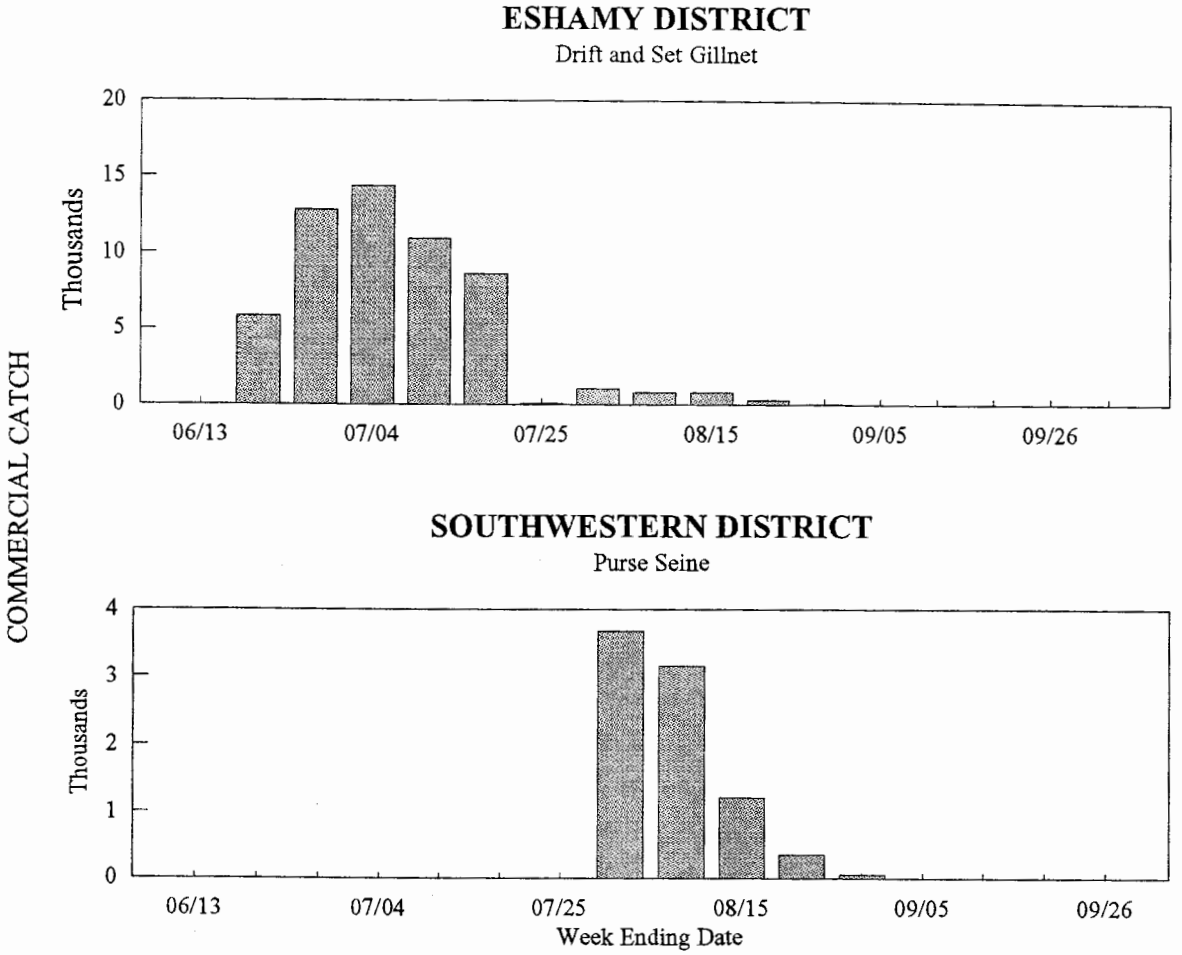


Figure 17. (Page 3 of 3)

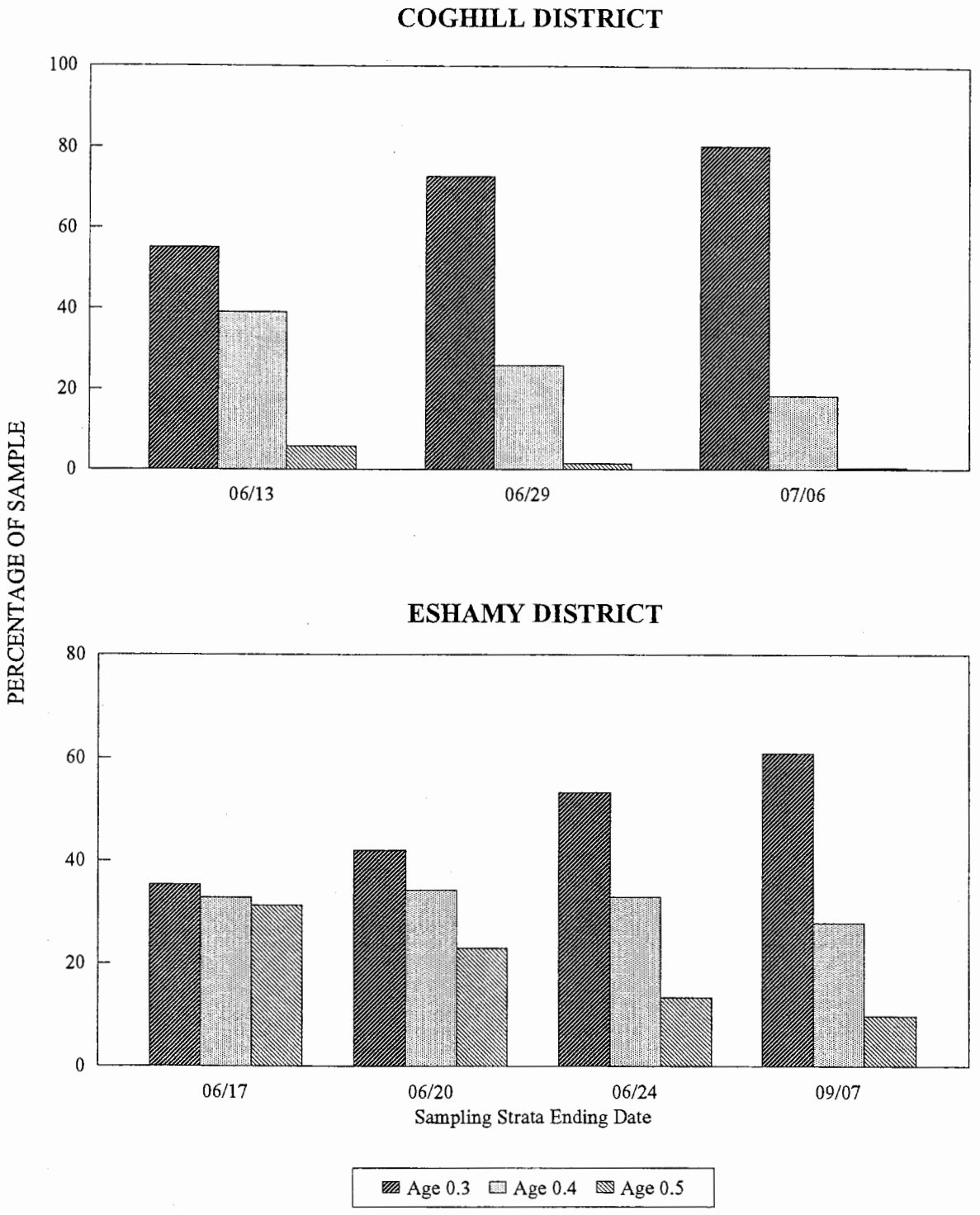


Figure 18. Temporally stratified age composition of chum salmon from the Coghill and Eshamy Districts commercial common property purse seine and gillnet harvests, Prince William Sound, 1992.

APPENDIX

Appendix A
Age and Sex Data for Commercial Common Property Salmon Catches From the Copper and Bering Rivers (Districts 200 and 212)

Appendix A.1. Temporally stratified age and sex composition of chinook salmon harvested in the Copper River District commercial common property drift gillnet fishery, 1992.

		Brood Year and Age Group														
		1989	1988		1987			1986				1985		1984		
		1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	2.3	3.2	1.5	2.4	2.5	3.4	Total
Stratum dates:	05/15 – 05/19															
Sampling dates:	05/15															
Sample size:	524															
Female	Percent of sample	0.0	0.0	0.4	0.4	6.3	0.4	0.0	37.6	0.8	0.0	0.0	2.3	0.0	0.0	48.1
	Number in catch	0	0	39	39	642	39	0	3,831	78	0	0	233	0	0	4,901
Male	Percent of sample	0.0	0.0	2.3	0.2	5.0	0.4	0.2	39.1	0.6	0.0	0.0	2.3	0.0	0.0	50.0
	Number in catch	0	0	233	19	506	39	19	3,987	58	0	0	233	0	0	5,096
Total	Percent of sample	0.0	0.0	2.7	0.6	11.3	0.8	0.2	78.6	1.3	0.0	0.0	4.6	0.0	0.0	100.0
	Number in catch	0	0	272	58	1,147	78	19	8,013	136	0	0	467	0	0	10,191
	Standard error	0	0	72	34	141	39	19	183	51	0	0	93	0	0	
Stratum dates:	05/22 – 05/26															
Sampling dates:	05/22															
Sample size:	547															
Female	Percent of sample	0.0	0.0	1.6	0.0	9.9	0.2	0.0	43.5	1.1	0.2	0.4	3.7	0.0	0.2	60.7
	Number in catch	0	0	261	0	1,568	29	0	6,909	174	29	58	581	0	29	9,638
Male	Percent of sample	0.2	0.0	3.8	0.2	3.8	0.7	0.0	24.1	0.4	0.0	0.7	1.5	0.0	0.2	35.6
	Number in catch	29	0	610	29	610	116	0	3,832	58	0	116	232	0	29	5,661
Total	Percent of sample	0.2	0.0	5.5	0.2	14.4	0.9	0.0	70.4	1.5	0.2	1.1	5.3	0.0	0.4	100.0
	Number in catch	29	0	871	29	2,293	145	0	11,177	232	29	174	842	0	58	15,880
	Standard Error	29	0	155	29	239	65	0	310	82	29	71	152	0	41	
Stratum dates:	05/28 – 06/01															
Sampling dates:	05/28															
Sample size:	457															
Female	Percent of sample	0.0	0.7	0.7	0.4	7.7	0.2	0.0	44.2	1.3	0.0	0.4	3.1	0.2	0.0	58.9
	Number in catch	0	64	64	43	751	21	0	4,336	129	0	43	301	21	0	5,774
Male	Percent of sample	0.2	0.0	3.7	0.0	5.3	0.2	0.0	27.6	0.0	0.0	0.9	2.8	0.0	0.0	40.7
	Number in catch	21	0	365	0	515	21	0	2,705	0	0	86	279	0	0	3,993
Total	Percent of sample	0.2	0.7	4.4	0.4	12.9	0.4	0.0	72.2	1.3	0.0	1.3	5.9	0.2	0.0	100.0
	Number in catch	21	64	429	43	1,266	43	0	7,084	129	0	129	580	21	0	9,810
	Standard Error	21	37	94	30	154	30	0	206	52	0	52	108	21	0	

–Continued–

		Brood Year and Age Group													
		1989	1988		1987			1986				1985		1984		
		1.1	0.3	1.2	0.4	1.3	2.2	0.5	1.4	2.3	3.2	1.5	2.4	2.5	3.4	Total
Stratum dates:	06/08 - 06/08															
Sampling dates:	06/08															
Sample size:	166															
Female	Percent of sample	0.0	0.0	0.6	0.6	5.4	0.0	0.0	41.6	0.0	0.0	0.0	3.0	0.0	0.0	51.2
	Number in catch	0	0	10	10	94	0	0	719	0	0	0	52	0	0	885
Male	Percent of sample	0.0	0.0	3.6	0.0	4.8	0.0	0.0	38.0	0.6	0.0	0.6	0.0	0.0	0.0	47.6
	Number in catch	0	0	62	0	83	0	0	656	10	0	10	0	0	0	823
Total	Percent of sample	0.0	0.0	4.2	0.6	10.8	0.0	0.0	80.1	0.6	0.0	0.6	3.0	0.0	0.0	100.0
	Number in catch	0	0	73	10	187	0	0	1,385	10	0	10	52	0	0	1,729
	Standard Error	0	0	27	10	42	0	0	54	10	0	10	23	0	0	
Stratum dates:	06/12 - 08/25															
Sampling dates:	06/13															
Sample size:	302															
Female	Percent of sample	0.0	0.0	0.3	0.0	5.6	0.0	0.0	44.7	0.3	0.0	1.7	0.0	0.0	0.0	52.6
	Number in catch	0	0	7	0	124	0	0	983	7	0	36	0	0	0	1,158
Male	Percent of sample	0.0	0.0	2.0	0.0	4.3	0.0	0.0	38.4	0.3	0.3	0.7	1.3	0.0	0.0	47.4
	Number in catch	0	0	44	0	95	0	0	845	7	7	15	29	0	0	1,042
Total	Percent of sample	0.0	0.0	2.3	0.0	9.9	0.0	0.0	83.1	0.7	0.3	2.3	1.3	0.0	0.0	100.0
	Number in catch	0	0	51	0	219	0	0	1,828	15	7	51	29	0	0	2,200
	Standard Error	0	0	19	0	38	0	0	48	10	7	19	14	0	0	
Strata combined:	05/15 - 08/25															
Sampling dates:	05/15 - 06/13															
Sample size:	1,996															
Female	Percent of sample	0.0	0.2	1.0	0.2	8.0	0.2	0.0	42.1	1.0	0.1	0.3	2.9	0.1	0.1	56.2
	Number in catch	0	64	382	92	3,178	89	0	16,779	388	29	137	1,167	21	29	22,357
Male	Percent of sample	0.1	0.0	3.3	0.1	4.5	0.4	0.0	30.2	0.3	0.0	0.6	1.9	0.0	0.1	41.7
	Number in catch	50	0	1,314	48	1,809	176	19	12,025	134	7	227	774	0	29	16,614
Total	Percent of sample	0.1	0.2	4.3	0.4	12.8	0.7	0.0	74.1	1.3	0.1	0.9	4.9	0.1	0.1	100.0
	Number in catch	50	64	1,696	141	5,113	266	19	29,487	522	36	364	1,969	21	58	39,810
	Standard Error	36	37	198	55	322	81	19	421	111	30	91	211	21	41	

Appendix A.2. Temporally stratified age and sex composition of sockeye salmon harvested in the Copper River District commercial common property drift gillnet fishery, 1992.

		Brood Year and Age Group										
		1989		1988		1987			1986		1985	
		0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	2.4	Total
Stratum dates:	05/15 - 05/15											
Sampling dates:	05/15											
Sample size:	279											
Female	Percent of sample	0.0	0.0	1.1	0.0	0.0	26.2	0.0	1.1	7.2	0.0	35.5
	Number in catch	0	0	110	0	0	2,682	0	110	735	0	3,637
Male	Percent of sample	0.0	0.0	2.9	0.0	0.4	48.0	0.7	1.4	10.4	0.0	63.8
	Number in catch	0	0	294	0	37	4,922	73	147	1,065	0	6,539
Total	Percent of sample	0.0	0.0	3.9	0.0	0.4	74.9	0.7	2.5	17.6	0.0	100.0
	Number in catch	0	0	404	0	37	7,678	73	257	1,800	0	10,249
	Standard error	0	0	120	0	37	266	52	96	234	0	
Stratum dates:	05/19 - 05/22											
Sampling dates:	05/19											
Sample size:	525											
Female	Percent of sample	0.0	0.0	3.4	1.0	0.4	31.8	0.0	0.8	7.8	0.0	45.1
	Number in catch	0	0	2,896	804	322	26,864	0	643	6,595	0	38,125
Male	Percent of sample	0.0	0.0	4.8	1.1	0.2	39.2	0.6	0.6	7.8	0.0	54.3
	Number in catch	0	0	4,022	965	161	33,138	483	483	6,595	0	45,846
Total	Percent of sample	0.0	0.0	8.4	2.1	0.6	71.2	0.8	1.3	15.6	0.0	100.0
	Number in Catch	0	0	7,078	1,770	483	60,163	643	1,126	13,191	0	84,454
	Standard Error	0	0	1,022	528	278	1,670	321	423	1,339	0	
Stratum dates:	05/25 - 05/26											
Sampling dates:	05/25											
Sample size:	520											
Female	Percent of sample	0.0	0.0	2.9	0.8	0.0	35.2	0.8	0.6	10.0	0.4	50.6
	Number in catch	0	0	3,701	987	0	45,152	987	740	12,830	493	64,891
Male	Percent of sample	0.0	0.0	3.8	1.5	0.6	32.5	0.2	0.4	10.0	0.2	49.2
	Number in catch	0	0	4,935	1,974	740	41,698	247	493	12,830	247	63,164
Total	Percent of sample	0.0	0.0	6.7	2.3	0.6	67.9	1.0	1.0	20.0	0.6	100.0
	Number in Catch	0	0	8,636	2,961	740	87,097	1,234	1,234	25,660	740	128,302
	Standard Error	0	0	1,411	846	427	2,630	550	550	2,253	427	
Stratum dates:	05/28 - 06/01											
Sampling dates:	06/01											
Sample size:	514											
Female	Percent of sample	0.2	0.0	2.7	1.8	0.2	36.2	0.6	1.0	7.4	0.0	50.0
	Number in catch	273	0	3,819	2,455	273	50,739	818	1,364	10,366	0	70,107
Male	Percent of sample	0.4	0.0	3.1	2.5	0.0	35.6	1.4	0.2	6.0	0.4	49.6
	Number in catch	546	0	4,365	3,546	0	49,921	1,910	273	8,456	546	69,561
Total	Percent of sample	0.6	0.0	5.8	4.5	0.2	71.8	1.9	1.2	13.6	0.4	100.0
	Number in Catch	818	0	8,184	6,274	273	100,659	2,728	1,637	19,095	546	140,214
	Standard Error	472	0	1,451	1,280	273	2,786	855	665	2,123	385	

-Continued-

		Brood Year and Age Group										
		1989		1988		1987			1986		1985	
		0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	2.4	Total
Stratum dates:	06/08 - 06/08											
Sampling dates:	06/08											
Sample size:	555											
Female	Percent of sample	0.0	0.0	2.2	3.1	0.0	43.4	0.2	0.2	2.0	0.0	51.0
	Number in catch	0	0	1,121	1,588	0	22,518	93	93	1,028	0	26,442
Male	Percent of sample	0.2	0.0	2.0	6.1	0.0	36.9	0.5	0.4	2.5	0.0	48.6
	Number in catch	93	0	1,028	3,177	0	19,154	280	187	1,308	0	25,228
Total	Percent of sample	0.2	0.0	4.3	9.2	0.0	80.5	0.7	0.5	4.5	0.0	100.0
	Number in catch	93	0	2,242	4,765	0	41,766	374	280	2,336	0	51,857
	Standard error	93	0	448	636	0	872	186	162	457	0	
Stratum dates:	06/12 - 06/23											
Sampling dates:	06/15											
Sample size:	544											
Female	Percent of sample	0.0	0.0	1.1	7.7	0.2	38.1	0.6	0.6	2.2	0.0	50.4
	Number in catch	0	0	2,213	15,488	369	76,335	1,106	1,106	4,425	0	101,042
Male	Percent of sample	0.7	0.0	2.0	10.5	0.0	34.4	0.7	0.2	1.1	0.0	49.6
	Number in catch	1,475	0	4,056	21,020	0	68,959	1,475	369	2,213	0	99,567
Total	Percent of sample	0.7	0.0	3.1	18.2	0.2	72.4	1.3	0.7	3.3	0.0	100.0
	Number in catch	1,475	0	6,269	36,508	369	145,294	2,581	1,475	6,638	0	200,609
	Standard error	735	0	1,498	3,322	369	3,847	970	735	1,540	0	
Stratum dates:	06/25 - 07/07											
Sampling dates:	06/30											
Sample size:	535											
Female	Percent of sample	1.5	0.0	1.7	7.5	0.0	34.2	0.6	0.2	1.5	0.0	47.1
	Number in catch	2,289	0	2,576	11,447	0	52,372	859	286	2,289	0	72,119
Male	Percent of sample	1.7	0.0	0.6	12.7	0.0	28.8	0.6	0.0	1.7	0.0	46.0
	Number in catch	2,576	0	859	19,461	0	44,072	859	0	2,576	0	70,402
Total	Percent of sample	3.4	0.0	2.4	21.5	0.0	67.1	1.1	0.2	4.3	0.0	100.0
	Number in catch	5,151	0	3,720	32,911	0	102,740	1,717	286	6,582	0	153,109
	Standard error	1,195	0	1,020	2,722	0	3,113	698	286	1,344	0	
Stratum dates:	07/09 - 07/18											
Sampling dates:	07/15											
Sample size:	538											
Female	Percent of sample	0.9	0.0	4.1	8.0	0.0	36.8	0.9	0.4	0.4	0.0	51.5
	Number in catch	1,106	0	4,865	9,509	0	43,785	1,106	442	442	0	61,255
Male	Percent of sample	0.7	0.4	2.8	11.5	0.2	31.6	0.6	0.2	0.6	0.0	48.5
	Number in catch	885	442	3,317	13,711	221	37,593	663	221	663	0	57,717
Total	Percent of sample	1.7	0.4	6.9	19.5	0.2	68.4	1.5	0.6	0.9	0.0	100.0
	Number in catch	1,990	442	8,182	23,219	221	81,379	1,769	663	1,106	0	118,972
	Standard error	658	312	1,299	2,035	221	2,387	621	382	493	0	

-Continued-

Appendix A.2. (Page 3 of 3)

		Brood Year and Age Group										
		1989		1988		1987			1986		1985	
		0.2	1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	2.4	Total
Stratum dates:	07/20 - 07/29											
Sampling dates:	07/23											
Sample size:	525											
Female	Percent of sample	1.0	0.2	5.9	9.1	0.0	34.5	0.6	0.0	0.8	0.0	52.0
	Number in catch	592	118	3,669	5,681	0	21,421	355	0	473	0	32,309
Male	Percent of sample	0.8	0.0	4.8	13.1	0.0	27.0	0.6	0.0	1.5	0.0	47.8
	Number in catch	473	0	2,959	8,166	0	16,805	355	0	947	0	29,705
Total	Percent of sample	1.7	0.2	10.7	22.3	0.0	61.7	1.1	0.0	2.3	0.0	100.0
	Number in catch	1,065	118	6,628	13,847	0	38,345	710	0	1,420	0	62,133
	Standard error	352	118	838	1,130	0	1,319	289	0	406	0	
Stratum dates:	07/30 - 09/23											
Sampling dates:	08/04											
Sample size:	528											
Female	Percent of sample	0.6	0.0	4.2	7.0	0.0	25.6	1.3	0.4	1.9	0.4	41.3
	Number in catch	120	0	877	1,474	0	5,379	279	80	398	80	8,687
Male	Percent of sample	3.2	1.7	5.3	14.2	0.2	30.3	1.9	0.4	1.5	0.0	58.7
	Number in catch	677	359	1,116	2,988	40	6,375	398	80	319	0	12,352
Total	Percent of sample	3.8	1.7	9.5	21.2	0.2	55.9	3.2	0.8	3.4	0.4	100.0
	Number in catch	797	359	1,992	4,463	40	11,755	677	159	717	80	21,039
	Standard error	175	119	268	375	40	455	162	79	166	56	
Strata combined:	05/15 - 09/23											
Sampling dates:	05/15 - 08/04											
Sample size:	5,063											
Female	Percent of sample	0.5	0.0	2.7	5.1	0.1	35.8	0.6	0.5	4.1	0.1	49.3
	Number in catch	4,379	118	25,846	49,434	963	347,248	5,603	4,866	39,583	573	478,614
Male	Percent of sample	0.7	0.1	2.8	7.7	0.1	33.2	0.7	0.2	3.8	0.1	49.4
	Number in catch	6,725	801	26,949	75,008	1,199	322,640	6,743	2,252	36,973	792	480,082
Total	Percent of sample	1.2	0.1	5.5	13.1	0.2	69.7	1.3	0.7	8.1	0.1	100.0
	Number in catch	11,391	919	53,335	126,718	2,162	676,876	12,507	7,118	78,546	1,365	970,938
	Standard error	1,670	355	3,332	5,200	722	7,102	1,760	1,317	4,031	578	

Appendix A.3. Estimated age and sex composition of sockeye salmon harvested in the Bering River District commercial common property drift gillnet fishery, 1992.

		Brood Year and Age Group								
		1989		1988		1987		1986	1985	
		0.2	1.1	0.3	1.2	1.3	2.2	2.3	2.4	Total
Stratum dates:	06/15 - 09/23									
Sampling dates:	06/16									
Sample size:	568									
Female	Percent of sample	0.2	0.0	0.7	3.5	51.1	0.2	0.5	0.0	56.2
	Number in catch	35	0	139	694	10,069	35	104	0	11,076
Male	Percent of sample	0.4	0.2	0.4	5.5	36.4	0.4	0.4	0.2	43.7
	Number in catch	69	35	69	1,076	7,187	69	69	35	8,611
Total	Percent of sample	0.5	0.2	1.1	9.0	87.7	0.5	0.9	0.2	100.0
	Number in catch	104	35	208	1,771	17,291	104	174	35	19,721
	Standard error	60	35	85	237	272	60	77	35	

Appendix A.4. Temporally stratified age and sex composition of coho salmon harvested in the Copper River District commercial common property drift gillnet fishery, 1992.

		Brood Year and Age Group				
		1990	1989	1988	1987	
		1.0	1.1	2.1	3.1	Total
Stratum dates:	05/15 - 08/18					
Sampling dates:	08/11 - 08/14					
Sample size:	397					
Female	Percent of sample	0.0	11.6	12.8	0.5	24.9
	Number in catch	0	7,147	7,923	311	15,381
Male	Percent of sample	0.0	35.0	36.3	1.8	73.0
	Number in catch	0	21,595	22,372	1,088	45,055
Total	Percent of sample	0.0	47.6	50.1	2.3	100.0
	Number in catch	0	29,364	30,917	1,398	61,679
	Standard error	0	1,548	1,550	461	
Stratum dates:	08/20 - 09/02					
Sampling dates:	08/26					
Sample size:	378					
Female	Percent of sample	0.0	38.1	22.8	0.5	61.4
	Number in catch	0	54,221	32,382	753	87,355
Male	Percent of sample	0.0	22.5	15.1	1.1	38.6
	Number in catch	0	32,005	21,462	1,506	54,974
Total	Percent of sample	0.0	60.6	37.8	1.6	100.0
	Number in catch	0	86,226	53,844	2,259	142,329
	Standard error	0	3,582	3,555	916	
Stratum dates:	09/03 - 09/23					
Sampling dates:	09/09					
Sample size:	363					
Female	Percent of sample	0.0	39.1	17.4	0.8	57.3
	Number in catch	0	34,275	15,207	724	50,206
Male	Percent of sample	0.3	27.0	15.2	0.3	42.7
	Number in catch	241	23,655	13,276	241	37,413
Total	Percent of sample	0.3	66.1	32.5	1.1	100.0
	Number in catch	241	57,930	28,482	965	87,619
	Standard error	241	2,180	2,157	481	
Strata combined:	05/15 - 09/23					
Sampling dates:	08/11 - 09/09					
Sample size:	1,138					
Female	Percent of sample	0.0	32.8	19.0	0.6	52.4
	Number in catch	0	95,642	55,512	1,788	152,942
Male	Percent of sample	0.1	26.5	19.6	1.0	47.1
	Number in catch	241	77,255	57,110	2,835	137,442
Total	Percent of sample	0.1	59.5	38.8	1.6	100.0
	Number in catch	241	173,519	113,243	4,623	291,627
	Standard error	241	4,470	4,438	1,133	

Appendix A.5. Temporally stratified age and sex composition of coho salmon harvested in the Bering River District commercial common property drift gillnet fishery, 1992.

		Brood Year and Age Group			
		1989	1988	1987	
		1.1	2.1	3.1	Total
Stratum dates:	08/17 - 09/09				
Sampling dates:	09/03				
Sample size:	358				
Female	Percent of sample	27.1	29.6	2.2	58.9
	Number in catch	26,044	28,461	2,148	56,653
Male	Percent of sample	21.5	17.6	2.0	41.1
	Number in catch	20,674	16,915	1,879	39,469
Total	Percent of sample	48.6	47.2	4.2	100.0
	Number in catch	46,719	45,376	4,027	96,122
	Standard error	2,543	2,540	1,019	
Stratum dates:	09/14 - 09/23				
Sampling dates:	09/17				
Sample size:	363				
Female	Percent of sample	33.6	31.7	2.2	67.5
	Number in catch	9,913	9,344	650	19,906
Male	Percent of sample	11.0	20.9	0.3	32.2
	Number in catch	3,250	6,175	81	9,506
Total	Percent of sample	44.9	52.6	2.5	100.0
	Number in catch	13,244	15,519	731	29,494
	Standard error	771	774	241	
Strata combined:	08/17 - 09/23				
Sampling dates:	09/03 - 09/17				
Sample size:	721				
Female	Percent of sample	28.6	30.1	2.2	60.9
	Number in catch	35,957	37,805	2,798	76,559
Male	Percent of sample	19.0	18.4	1.6	39.0
	Number in catch	23,924	23,090	1,961	48,975
Total	Percent of sample	47.7	48.5	3.8	100.0
	Number in catch	59,962	60,895	4,759	125,616
	Standard error	2,657	2,655	1,047	

Appendix B
Personal–use, Subsistence, and Sport Fish Salmon Catches From the Upper Copper River

Appendix B.1. Daily catches of chinook, sockeye, and coho salmon in the personal–use and subsistence fisheries on the upper Copper River, 1992.

	Personal–use catch						Subsistence catch						Combined catches					
	Chinook		Sockeye		Coho		Chinook		Sockeye		Coho		Chinook		Sockeye		Coho	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
6/01	1	1	20	20	0	0	24	24	356	356	0	0	25	25	376	376	0	0
6/02	0	1	0	20	0	0	4	28	47	403	0	0	4	29	47	423	0	0
6/03	0	1	1	21	0	0	8	36	112	515	0	0	8	37	113	536	0	0
6/04	0	1	0	21	0	0	1	37	22	537	0	0	1	38	22	558	0	0
6/05	68	69	552	573	0	0	1	38	311	848	0	0	69	107	863	1,421	0	0
6/06	230	299	1,497	2,070	0	0	19	57	202	1,050	0	0	249	356	1,699	3,120	0	0
6/07	67	366	755	2,825	0	0	18	75	302	1,352	0	0	85	441	1,057	4,177	0	0
6/08	1	367	18	2,843	0	0	21	96	138	1,490	0	0	22	463	156	4,333	0	0
6/09	0	367	15	2,858	0	0	30	126	181	1,671	0	0	30	493	196	4,529	0	0
6/10	1	368	71	2,929	0	0	66	192	664	2,335	0	0	67	560	735	5,264	0	0
6/11	35	403	494	3,423	0	0	27	219	283	2,618	0	0	62	622	777	6,041	0	0
6/12	170	573	1,124	4,547	0	0	25	244	383	3,001	0	0	195	817	1,507	7,548	0	0
6/13	290	863	1,566	6,113	0	0	27	271	810	3,811	0	0	317	1,134	2,376	9,924	0	0
6/14	161	1,024	667	6,780	0	0	16	287	508	4,319	0	0	177	1,311	1,175	11,099	0	0
6/15	0	1,024	83	6,863	0	0	83	370	1,485	5,804	0	0	83	1,394	1,568	12,667	0	0
6/16	36	1,060	490	7,353	0	0	19	389	331	6,135	0	0	55	1,449	821	13,488	0	0
6/17	82	1,142	929	8,282	0	0	40	429	414	6,549	0	0	122	1,571	1,343	14,831	0	0
6/18	99	1,241	1,219	9,501	0	0	22	451	260	6,809	0	0	121	1,692	1,479	16,310	0	0
6/19	166	1,407	1,603	11,104	0	0	28	479	346	7,155	0	0	194	1,886	1,949	18,259	0	0
6/20	330	1,737	3,657	14,761	0	0	69	548	1,137	8,292	0	0	399	2,285	4,794	23,053	0	0
6/21	79	1,816	1,362	16,123	0	0	28	576	284	8,576	0	0	107	2,392	1,646	24,699	0	0
6/22	40	1,856	1,109	17,232	0	0	21	597	310	8,886	0	0	61	2,453	1,419	26,118	0	0
6/23	72	1,928	1,218	18,450	0	0	37	634	467	9,353	0	0	109	2,562	1,685	27,803	0	0
6/24	37	1,965	1,332	19,782	0	0	5	639	86	9,439	0	0	42	2,604	1,418	29,221	0	0
6/25	60	2,025	2,320	22,102	0	0	39	678	627	10,066	0	0	99	2,703	2,947	32,168	0	0
6/26	132	2,157	3,943	26,045	0	0	42	720	586	10,652	0	0	174	2,877	4,529	36,697	0	0
6/27	117	2,274	4,549	30,594	0	0	76	796	843	11,495	0	0	193	3,070	5,392	42,089	0	0
6/28	51	2,325	1,979	32,573	0	0	34	830	930	12,425	0	0	85	3,155	2,909	44,998	0	0
6/29	24	2,349	1,142	33,715	0	0	18	848	502	12,927	0	0	42	3,197	1,644	46,642	0	0
6/30	42	2,391	1,451	35,166	0	0	71	919	1,698	14,625	0	0	113	3,310	3,149	49,791	0	0

–Continued–

Appendix B.1. (Page 2 of 4)

	Personal-use catch						Subsistence catch						Combined catches					
	Chinook		Sockeye		Coho		Chinook		Sockeye		Coho		Chinook		Sockeye		Coho	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
7/01	41	2,432	1,533	36,699	0	0	22	941	814	15,439	0	0	63	3,373	2,347	52,138	0	0
7/02	44	2,476	1,376	38,075	0	0	38	979	865	16,304	0	0	82	3,455	2,241	54,379	0	0
7/03	67	2,543	1,463	39,538	0	0	12	991	953	17,257	0	0	79	3,534	2,416	56,795	0	0
7/04	69	2,612	1,066	40,604	0	0	31	1,022	1,430	18,687	0	0	100	3,634	2,496	59,291	0	0
7/05	20	2,632	471	41,075	0	0	7	1,029	692	19,379	0	0	27	3,661	1,163	60,454	0	0
7/06	17	2,649	886	41,961	0	0	8	1,037	631	20,010	0	0	25	3,686	1,517	61,971	0	0
7/07	14	2,663	814	42,775	0	0	11	1,048	499	20,509	0	0	25	3,711	1,313	63,284	0	0
7/08	20	2,683	997	43,772	0	0	7	1,055	256	20,765	0	0	27	3,738	1,253	64,537	0	0
7/09	40	2,723	1,362	45,134	0	0	3	1,058	429	21,194	0	0	43	3,781	1,791	66,328	0	0
7/10	69	2,792	1,967	47,101	0	0	7	1,065	974	22,168	0	0	76	3,857	2,941	69,269	0	0
7/11	95	2,887	2,943	50,044	0	0	18	1,083	585	22,753	0	0	113	3,970	3,528	72,797	0	0
7/12	24	2,911	1,261	51,305	0	0	19	1,102	835	23,588	0	0	43	4,013	2,096	74,893	0	0
7/13	23	2,934	1,100	52,405	0	0	18	1,120	341	23,929	0	0	41	4,054	1,441	76,334	0	0
7/14	24	2,958	1,452	53,857	0	0	15	1,135	694	24,623	0	0	39	4,093	2,146	78,480	0	0
7/15	19	2,977	1,390	55,247	0	0	79	1,214	2,028	26,651	0	0	98	4,191	3,418	81,898	0	0
7/16	27	3,004	1,578	56,825	0	0	3	1,217	327	26,978	0	0	30	4,221	1,905	83,803	0	0
7/17	59	3,063	2,406	59,231	0	0	2	1,219	317	27,295	0	0	61	4,282	2,723	86,526	0	0
7/18	63	3,126	4,626	63,857	0	0	9	1,228	647	27,942	0	0	72	4,354	5,273	91,799	0	0
7/19	14	3,140	2,185	66,042	0	0	14	1,242	535	28,477	0	0	28	4,382	2,720	94,519	0	0
7/20	4	3,144	127	66,169	0	0	9	1,251	411	28,888	0	0	13	4,395	538	95,057	0	0
7/21	0	3,144	28	66,197	0	0	15	1,266	570	29,458	0	0	15	4,410	598	95,655	0	0
7/22	0	3,144	27	66,224	0	0	0	1,266	139	29,597	0	0	0	4,410	166	95,821	0	0
7/23	6	3,150	1,807	68,031	0	0	1	1,267	136	29,733	0	0	7	4,417	1,943	97,764	0	0
7/24	7	3,157	1,719	69,750	0	0	4	1,271	774	30,507	0	0	11	4,428	2,493	100,257	0	0
7/25	15	3,172	2,647	72,397	0	0	9	1,280	486	30,993	0	0	24	4,452	3,133	103,390	0	0
7/26	9	3,181	1,018	73,415	0	0	4	1,284	365	31,358	0	0	13	4,465	1,383	104,773	0	0
7/27	4	3,185	52	73,467	0	0	8	1,292	344	31,702	0	0	12	4,477	396	105,169	0	0
7/28	7	3,192	73	73,540	0	0	17	1,309	863	32,565	0	0	24	4,501	936	106,105	0	0
7/29	0	3,192	0	73,540	0	0	11	1,320	494	33,059	0	0	11	4,512	494	106,599	0	0
7/30	2	3,194	930	74,470	0	0	2	1,322	393	33,452	0	0	4	4,516	1,323	107,922	0	0
7/31	8	3,202	1,465	75,935	0	0	0	1,322	490	33,942	0	0	8	4,524	1,955	109,877	0	0

-Continued-

Appendix B.1. (Page 3 of 4)

	Personal-use catch						Subsistence catch						Combined catches					
	Chinook		Sockeye		Coho		Chinook		Sockeye		Coho		Chinook		Sockeye		Coho	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
8/01	5	3,207	1,527	77,462	0	0	0	1,322	245	34,187	0	0	5	4,529	1,772	111,649	0	0
8/02	13	3,220	642	78,104	0	0	2	1,324	351	34,538	0	0	15	4,544	993	112,642	0	0
8/03	0	3,220	15	78,119	0	0	1	1,325	321	34,859	0	0	1	4,545	336	112,978	0	0
8/04	0	3,220	0	78,119	0	0	1	1,326	425	35,284	0	0	1	4,546	425	113,403	0	0
8/05	0	3,220	0	78,119	0	0	0	1,326	508	35,792	0	0	0	4,546	508	113,911	0	0
8/06	0	3,220	429	78,548	0	0	3	1,329	272	36,064	0	0	3	4,549	701	114,612	0	0
8/07	3	3,223	672	79,220	4	4	1	1,330	336	36,400	0	0	4	4,553	1,008	115,620	4	4
8/08	0	3,223	1,023	80,243	1	5	1	1,331	686	37,086	0	0	1	4,554	1,709	117,329	1	5
8/09	0	3,223	505	80,748	0	5	1	1,332	364	37,450	0	0	1	4,555	869	118,198	0	5
8/10	1	3,224	5	80,753	0	5	0	1,332	409	37,859	1	1	1	4,556	414	118,612	1	6
8/11	0	3,224	5	80,758	2	7	0	1,332	138	37,997	0	1	0	4,556	143	118,755	2	8
8/12	0	3,224	0	80,758	0	7	11	1,343	143	38,140	0	1	11	4,567	143	118,898	0	8
8/13	2	3,226	465	81,223	0	7	1	1,344	157	38,297	4	5	3	4,570	622	119,520	4	12
8/14	2	3,228	722	81,945	10	17	3	1,347	317	38,614	4	9	5	4,575	1,039	120,559	14	26
8/15	16	3,244	1,326	83,271	49	66	3	1,350	685	39,299	13	22	19	4,594	2,011	122,570	62	88
8/16	6	3,250	247	83,518	24	90	6	1,356	628	39,927	12	34	12	4,606	875	123,445	36	124
8/17	0	3,250	1	83,519	0	90	0	1,356	186	40,113	0	34	0	4,606	187	123,632	0	124
8/18	0	3,250	15	83,534	0	90	2	1,358	250	40,363	21	55	2	4,608	265	123,897	21	145
8/19	0	3,250	44	83,578	7	97	0	1,358	230	40,593	14	69	0	4,608	274	124,171	21	166
8/20	1	3,251	72	83,650	63	160	0	1,358	349	40,942	10	79	1	4,609	421	124,592	73	239
8/21	19	3,270	177	83,827	48	208	0	1,358	170	41,112	0	79	19	4,628	347	124,939	48	287
8/22	2	3,272	224	84,051	92	300	1	1,359	107	41,219	0	79	3	4,631	331	125,270	92	379
8/23	5	3,277	67	84,118	39	339	2	1,361	77	41,296	0	79	7	4,638	144	125,414	39	418
8/24	0	3,277	0	84,118	0	339	0	1,361	88	41,384	0	79	0	4,638	88	125,502	0	418
8/25	1	3,278	80	84,198	2	341	5	1,366	186	41,570	0	79	6	4,644	266	125,768	2	420
8/26	0	3,278	0	84,198	16	357	0	1,366	91	41,661	12	91	0	4,644	91	125,859	28	448
8/27	0	3,278	59	84,257	44	401	0	1,366	81	41,742	0	91	0	4,644	140	125,999	44	492
8/28	1	3,279	162	84,419	100	501	0	1,366	41	41,783	0	91	1	4,645	203	126,202	100	592
8/29	1	3,280	123	84,542	181	682	0	1,366	117	41,900	0	91	1	4,646	240	126,442	181	773
8/30	0	3,280	65	84,607	51	733	0	1,366	181	42,081	4	95	0	4,646	246	126,688	55	828
8/31	1	3,281	4	84,611	0	733	1	1,367	154	42,235	12	107	2	4,648	158	126,846	12	840

-Continued-

Appendix B.1. (Page 4 of 4)

	Personal-use catch						Subsistence catch						Combined catches					
	Chinook		Sockeye		Coho		Chinook		Sockeye		Coho		Chinook		Sockeye		Coho	
Date	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.
9/01	0	3,281	16	84,627	0	733	0	1,367	17	42,252	0	107	0	4,648	33	126,879	0	840
9/02	2	3,283	8	84,635	7	740	0	1,367	25	42,277	0	107	2	4,650	33	126,912	7	847
9/03	25	3,308	41	84,676	16	756	0	1,367	22	42,299	0	107	25	4,675	63	126,975	16	863
9/04	0	3,308	75	84,751	94	850	0	1,367	69	42,368	11	118	0	4,675	144	127,119	105	968
9/05	0	3,308	62	84,813	109	959	0	1,367	63	42,431	0	118	0	4,675	125	127,244	109	1,077
9/06	0	3,308	78	84,891	192	1,151	0	1,367	34	42,465	0	118	0	4,675	112	127,356	192	1,269
9/07	26	3,334	38	84,929	158	1,309	0	1,367	14	42,479	23	141	26	4,701	52	127,408	181	1,450
9/08	0	3,334	0	84,929	1	1,310	0	1,367	47	42,526	7	148	0	4,701	47	127,455	8	1,458
9/09	0	3,334	1	84,930	34	1,344	0	1,367	28	42,554	27	175	0	4,701	29	127,484	61	1,519
9/10	0	3,334	1	84,931	16	1,360	1	1,368	11	42,565	57	232	1	4,702	12	127,496	73	1,592
9/11	0	3,334	17	84,948	18	1,378	0	1,368	1	42,566	9	241	0	4,702	18	127,514	27	1,619
9/12	0	3,334	9	84,957	44	1,422	0	1,368	6	42,572	0	241	0	4,702	15	127,529	44	1,663
9/13	0	3,334	1	84,958	15	1,437	0	1,368	12	42,584	4	245	0	4,702	13	127,542	19	1,682
9/14	0	3,334	0	84,958	0	1,437	0	1,368	25	42,609	0	245	0	4,702	25	127,567	0	1,682
9/15	0	3,334	6	84,964	9	1,446	0	1,368	35	42,644	5	250	0	4,702	41	127,608	14	1,696
9/16	0	3,334	0	84,964	0	1,446	0	1,368	8	42,652	0	250	0	4,702	8	127,616	0	1,696
9/17	0	3,334	0	84,964	0	1,446	0	1,368	0	42,652	0	250	0	4,702	0	127,616	0	1,696
9/18	3	3,337	3	84,967	17	1,463	0	1,368	0	42,652	6	256	3	4,705	3	127,619	23	1,719
9/19	0	3,337	2	84,969	19	1,482	0	1,368	0	42,652	0	256	0	4,705	2	127,621	19	1,738
9/20	0	3,337	0	84,969	0	1,482	0	1,368	2	42,654	62	318	0	4,705	2	127,623	62	1,800
9/21	0	3,337	0	84,969	0	1,482	0	1,368	1	42,655	4	322	0	4,705	1	127,624	4	1,804
9/22	0	3,337	3	84,972	4	1,486	0	1,368	0	42,655	0	322	0	4,705	3	127,627	4	1,808
9/23	0	3,337	2	84,974	0	1,486	0	1,368	34	42,689	8	330	0	4,705	36	127,663	8	1,816
9/24	0	3,337	0	84,974	0	1,486	0	1,368	0	42,689	0	330	0	4,705	0	127,663	0	1,816
9/25	0	3,337	0	84,974	0	1,486	0	1,368	0	42,689	0	330	0	4,705	0	127,663	0	1,816
9/26	0	3,337	0	84,974	0	1,486	0	1,368	0	42,689	0	330	0	4,705	0	127,663	0	1,816
9/27	0	3,337	0	84,974	0	1,486	0	1,368	0	42,689	0	330	0	4,705	0	127,663	0	1,816
9/28	0	3,337	7	84,981	1	1,487	0	1,368	0	42,689	0	330	0	4,705	7	127,670	1	1,817
9/29	0	3,337	0	84,981	0	1,487	0	1,368	0	42,689	0	330	0	4,705	0	127,670	0	1,817
9/30	0	3,337	0	84,981	0	1,487	0	1,368	0	42,689	0	330	0	4,705	0	127,670	0	1,817
Total		3,337		84,981		1,487		1,368		42,689		330		4,705		127,670		1,817

Appendix B.2. Estimated age and sex composition of chinook salmon personal–use and subsistence harvests in the upper Copper River area, 1992.

		Brood Year and Age Group						
		1989	1988	1987		1986		
		1.1	1.2	1.3	2.2	1.4	2.3	Total
Stratum dates:	06/01 – 09/30							
Sampling dates:	06/06 – 07/18							
Sample size:	90							
Female	Percent of sample	1.1	5.6	13.3	1.1	40.0	1.1	62.2
	Number in catch	52	261	627	52	1,882	52	2,928
Male	Percent of sample	2.2	4.4	5.6	0.0	24.4	0.0	36.7
	Number in catch	105	209	261	0	1,150	0	1,725
Total	Percent of sample	3.3	10.0	20.0	1.1	64.4	1.1	100.0
	Number in catch	157	471	941	52	3,032	52	4,705
	Standard error	90	150	199	52	239	52	

Appendix B.3. Temporally stratified age and sex composition of sockeye salmon harvested in upper Copper River personal-use and subsistence fisheries, 1992.

		Brood Year and Age Group								
		1990	1989		1988			1987		
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3	Total
Stratum dates:	06/01 - 06/10									
Sampling dates:	06/05 - 06/07									
Sample size:	167									
Female	Percent of sample	0.6	6.6	14.4	0.0	34.1	4.8	0.0	2.4	62.9
	Number in catch	32	347	757	0	1,797	252	0	126	3,310
Male	Percent of sample	0.6	6.6	2.4	0.0	25.1	0.0	0.0	2.4	37.1
	Number in catch	32	347	126	0	1,324	0	0	126	1,954
Total	Percent of sample	1.2	13.2	16.8	0.0	59.3	4.8	0.0	4.8	100.0
	Number in catch	63	693	883	0	3,121	252	0	252	5,264
	Standard error	44	138	153	0	201	87	0	87	
Stratum dates:	06/11 - 06/17									
Sampling dates:	06/12 - 06/14									
Sample size:	181									
Female	Percent of sample	0.0	6.1	7.2	0.6	38.7	2.8	0.0	3.9	59.1
	Number in catch	0	581	687	53	3,700	264	0	370	5,656
Male	Percent of sample	0.0	5.5	3.3	0.0	29.3	0.0	0.0	2.8	40.9
	Number in catch	0	529	317	0	2,801	0	0	264	3,911
Total	Percent of sample	0.0	11.6	10.5	0.6	68.0	2.8	0.0	6.6	100.0
	Number in catch	0	1,110	1,004	53	6,501	264	0	634	9,567
	Standard error	0	228	219	53	333	117	0	177	
Stratum dates:	06/18 - 06/24									
Sampling dates:	06/19 - 06/21									
Sample size:	314									
Female	Percent of sample	1.9	7.0	10.8	0.0	38.5	3.5	0.3	5.7	67.8
	Number in catch	275	1,008	1,558	0	5,545	504	46	825	9,761
Male	Percent of sample	0.3	3.8	2.9	0.0	20.7	0.3	0.3	3.8	32.2
	Number in catch	46	550	412	0	2,979	46	46	550	4,629
Total	Percent of sample	2.2	10.8	13.7	0.0	59.2	3.8	0.6	9.6	100.0
	Number in catch	321	1,558	1,971	0	8,524	550	92	1,375	14,390
	Standard error	120	253	280	0	400	156	65	239	
Stratum dates:	06/25 - 07/01									
Sampling dates:	06/26 - 06/28									
Sample size:	320									
Female	Percent of sample	1.3	2.5	14.7	0.0	40.9	4.4	0.6	5.3	69.7
	Number in catch	286	573	3,366	0	9,382	1,003	143	1,217	15,970
Male	Percent of sample	0.3	2.5	1.9	0.0	20.6	0.9	0.3	3.8	30.3
	Number in catch	72	573	430	0	4,727	215	72	859	6,947
Total	Percent of sample	1.6	5.0	16.6	0.0	61.6	5.3	0.9	9.1	100.0
	Number in catch	358	1,146	3,796	0	14,108	1,217	215	2,077	22,917
	Standard error	159	280	477	0	624	288	124	368	

-Continued-

		Brood Year and Age Group								
		1990	1989		1988			1987		
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3	Total
Stratum dates:	07/02 - 07/08									
Sampling dates:	07/03 - 07/05									
Sample size:	262									
Female	Percent of sample	1.5	4.6	5.7	0.0	45.8	0.0	0.8	0.8	59.2
	Number in catch	189	568	710	0	5,679	0	95	95	7,335
Male	Percent of sample	0.4	1.5	5.3	0.0	33.2	0.0	0.4	0.0	40.8
	Number in catch	47	189	663	0	4,117	0	47	0	5,064
Total	Percent of sample	1.9	6.1	11.1	0.0	79.0	0.0	1.1	0.8	100.0
	Number in catch	237	757	1,372	0	9,796	0	142	95	12,399
	Standard error	105	184	241	0	313	0	82	67	
Stratum dates:	07/09 - 07/15									
Sampling dates:	07/10 - 07/12									
Sample size:	279									
Female	Percent of sample	0.0	2.2	10.4	0.4	51.6	0.0	0.0	0.4	64.9
	Number in catch	0	373	1,805	62	8,961	0	0	62	11,263
Male	Percent of sample	0.0	2.2	2.5	0.0	30.1	0.0	0.0	0.4	35.1
	Number in catch	0	373	436	0	5,227	0	0	62	6,098
Total	Percent of sample	0.0	4.3	12.9	0.4	81.7	0.0	0.0	0.7	100.0
	Number in catch	0	747	2,240	62	14,187	0	0	124	17,361
	Standard error	0	211	349	62	402	0	0	88	
Stratum dates:	07/16 - 07/22									
Sampling dates:	07/17 - 07/19									
Sample size:	278									
Female	Percent of sample	0.0	1.8	5.8	0.4	59.4	1.1	0.0	1.4	69.8
	Number in catch	0	250	801	50	8,264	150	0	200	9,716
Male	Percent of sample	0.0	0.4	2.2	0.0	27.3	0.0	0.4	0.0	30.2
	Number in catch	0	50	300	0	3,806	0	50	0	4,207
Total	Percent of sample	0.0	2.2	7.9	0.4	86.7	1.1	0.4	1.4	100.0
	Number in catch	0	300	1,102	50	12,070	150	50	200	13,923
	Standard error	0	122	226	50	284	86	50	100	
Stratum dates:	07/23 - 07/29									
Sampling dates:	07/24 - 07/26									
Sample size:	277									
Female	Percent of sample	0.0	1.1	6.1	0.4	59.2	0.4	0.4	0.4	67.9
	Number in catch	0	117	661	39	6,381	39	39	39	7,315
Male	Percent of sample	0.0	0.0	4.0	0.0	28.2	0.0	0.0	0.0	32.1
	Number in catch	0	0	428	0	3,035	0	0	0	3,463
Total	Percent of sample	0.0	1.1	10.1	0.4	87.4	0.4	0.4	0.4	100.0
	Number in catch	0	117	1,089	39	9,416	39	39	39	10,778
	Standard error	0	67	196	39	216	39	39	39	

-Continued-

Appendix B.3. (Page 3 of 3)

		Brood Year and Age Group								
		1990	1989		1988			1987		
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3	Total
Stratum dates:	07/30 - 08/05									
Sampling dates:	07/31 - 08/02									
Sample size:	263									
Female	Percent of sample	0.0	0.0	8.0	0.0	65.4	0.0	0.0	0.8	74.1
	Number in catch	0	0	584	0	4,782	0	0	56	5,421
Male	Percent of sample	0.0	0.0	2.3	0.0	23.2	0.0	0.4	0.0	25.9
	Number in catch	0	0	167	0	1,696	0	28	0	1,891
Total	Percent of sample	0.0	0.0	10.3	0.0	88.6	0.0	0.4	0.8	100.0
	Number in catch	0	0	751	0	6,478	0	28	56	7,312
	Standard error	0	0	137	0	144	0	28	39	
Stratum dates:	08/06 - 08/12									
Sampling dates:	08/07 - 08/09									
Sample size:	247									
Female	Percent of sample	0.4	0.8	6.9	0.0	56.7	0.0	0.4	0.8	66.0
	Number in catch	20	40	343	0	2,827	0	20	40	3,291
Male	Percent of sample	0.0	0.0	2.4	0.0	30.8	0.0	0.4	0.4	34.0
	Number in catch	0	0	121	0	1,534	0	20	20	1,696
Total	Percent of sample	0.4	0.8	9.3	0.0	87.4	0.0	0.8	1.2	100.0
	Number in catch	20	40	464	0	4,361	0	40	61	4,987
	Standard error	20	28	92	0	105	0	28	35	
Stratum dates:	08/13 - 09/30									
Sampling dates:	08/14 - 08/16									
Sample size:	270									
Female	Percent of sample	0.0	0.0	4.1	0.0	67.0	0.0	0.4	0.4	71.9
	Number in catch	0	0	357	0	5,880	0	32	32	6,303
Male	Percent of sample	0.0	0.0	1.5	0.0	25.9	0.0	0.0	0.7	28.1
	Number in catch	0	0	130	0	2,274	0	0	65	2,469
Total	Percent of sample	0.0	0.0	5.6	0.0	93.0	0.0	0.4	1.1	100.0
	Number in catch	0	0	487	0	8,155	0	32	97	8,772
	Standard error	0	0	123	0	137	0	32	56	
Strata Combined:	06/01 - 09/30									
Sampling dates:	06/05 - 08/16									
Sample size:	2,858									
Female	Percent of sample	0.6	3.0	9.1	0.2	49.5	1.7	0.3	2.4	66.8
	Number in catch	802	3,858	11,629	204	63,197	2,212	375	3,063	85,342
Male	Percent of sample	0.2	2.0	2.8	0.0	26.3	0.2	0.2	1.5	33.2
	Number in catch	196	2,611	3,530	0	33,521	261	263	1,947	42,328
Total	Percent of sample	0.8	5.1	11.9	0.2	75.8	1.9	0.5	3.9	100.0
	Number in catch	999	6,469	15,159	204	96,718	2,473	638	5,010	127,670
	Standard error	231	558	830	103	1,067	371	181	511	

Appendix C
Salmon Escapements to Coastal Streams of the Copper River Delta and the Bering River

Appendix C.1. Aerial escapement indices for sockeye salmon returning to the Copper River delta and the Bering River, by date and location, 1992.

Copper River Delta [a]		Aerial Escapement Indices by Survey Date						
System and Drainage	Survey System	11 June	18 June	23 June	30 June	15 July	23 July	08 Aug.
Eyak Lake	Eyak River	450	25	NC	NS	NS	NS	NS
	West shore beaches	4,920	NC	4,353	820	10,800	14,200 *	4,100 +
	Middle Arm beaches [b]	1,300 *	NS	1,400	2,500	4,900	4,400 *	3,100 +
	North shore beaches	NS	NS	50	3,400	860	1,570 *	250 +
	Hatchery Creek delta	0	NS	800	800	380	600 *	1,800
	Hatchery Creek	0	NS	350	1,200	1,900	1,600 *	350
	Power Creek delta	0	NS	0	0	1,100	1,200 *	0
	Power Creek	0	NS	0	0	15	220 *	50
Ibek Creek	Ibek Creek	NS	NS	NS	NS	NS	NS	NS
Alaganik Slough	Alaganik Slough	0	NC	NC	NS	NS	NS	NS
	McKinley Lake	0	NS	0	450	10,300 *	700	500 +
	Salmon Creek, West Fork	NS	NS	0	0	25 *	NS	1,900
	Salmon Creek, East Fork	NS	NS	0	0	0 *	NS	960
26/27 Mile Creek	26/27 Mile Creek	30	NC	520	830	1,420 *	320	280
39 Mile Creek	39 Mile Creek	0	0	0	20	600	1,500	2,300
Goat Mountain Creek	Goat Mountain Creek	0	0	0	0	0	0	0
Pleasant Creek	Pleasant Creek [b]	0	0	317 *	1,250 *	140	0	NS
Martin River	Martin River – Lower	720	NC	380	536	1,963	930	NC
	Ragged Point River	NS	NS	NS	0	0	0	1,000
	Ragged Point Lake outlet	NS	NS	NS	NS	NS	NS	NS
	Ragged Point Lake	NS	NS	NS	NS	NS	NS	NS
	Martin River – upper [b]	161	NC	760	2,100	1,400 *	720	NC
	Martin Lake outlet	280	NC	1,150	2,000	800 *	150 +	NC
	Martin Lake	3,268	NC	4,130	10,900	6,300 *	1,600 +	NC
	Martin Lake feeders	0	0	270	460	6,900 *	5,000	300
	Pothole River	0	0	30	530	300 *	400	NC
	Pothole Lake outlet	0	0	0	0	800 *	20	NC
	Pothole Lake	0	0	0	0	200 *	400	NC
	Little Martin Lake outlet	3	NS	0	110	20 *	0	NS
	Little Martin Lake	0	NS	0	170	1,760 *	3,200	NS
	Tokun Springs	6	NS	380	300	600 *	420	NS
	Tokun River	480	NS	720	700	430 *	80	NS
	Tokun Lake outlet	280	NS	NC	650	300 *	NC	NS
	Tokun Lake	14	NS	NC	2,700	6,900 *	NC	NS
Martin River Slough	Martin River Slough	60	NS	3,280	3,670	3,955 *	NS	NS
Copper River Aerial Survey Daily Total		11,972	25	18,890	36,096	65,068	39,230	16,890

–Continued–

Appendix C.1. (Page 2 of 5).

Copper River Delta [a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date 15 Aug.	20 Aug.	29 Aug.	03 Sept.	08 Sept.	14 Sept.	22 Sept.
Eyak Lake	Eyak River	NS	0	NS	NC	0	0	0
	West shore beaches	5,600	NC	2,000 +	700	2,900	2,800	1,500
	Middle Arm beaches [b]	3,200	3,500	2,700	500	4,600	4,000	3,300
	North Shore beaches	1,200	1,050	800	100	2,100	1,500	1,250
	Hatchery Creek delta	300	2,200	1,900	500	1,500	2,500	400
	Hatchery Creek	100	250	600	100	700	800	600
	Power Creek delta	1,000	1,100	0	NS	300	800	0
	Power Creek	0	25	30	NS	75	700	200
Ibek Creek	Ibek Creek	4	40	NC	0	0	0	0
Alaganik Slough	Alaganik Slough	NS	0	NC	NC	0	0	0
	McKinley Lake	800	450	600	700	NS	800	600
	Salmon Creek, West Fork	700	3,300	900	200	NS	900	900
	Salmon Creek, East Fork	220	310	1,070	500	NS	450	320
26/27 Mile Creek	26/27 Mile Creek	200	435	120	170	80	65	0
39 Mile Creek	39 Mile Creek	4,500 *	3,260	3,600	1,000	2,340	1,200	1,100
Goat Mountain Creek	Goat Mountain Creek	600	620 *	0	0	20	60	20
Pleasant Creek	Pleasant Creek [b]	NS	NS	0	0	0	NS	NS
Martin River	Martin River – lower	0	80	0	0	0	0	0
	Ragged Point River	260	180	300	10	0 *	100	50
	Ragged Point Lake outlet	100	300	200	50	300 *	200	100
	Ragged Point Lake	400	600	700	400	2,300 *	1,000	800
	Martin River – upper [b]	50	350	30 +	100	300	300	200
	Martin Lake outlet	0	6	NS	0	NC	0	0
	Martin Lake	0	450	NS	0	NC	350	1,820
	Martin Lake feeders	10	0	NS	0	12	20	100
	Pothole River	0	0	0	0	0	15	10
	Pothole Lake outlet	0	15	0	0	10	0	70
	Pothole Lake	150	820	325	440	620	780	3,600
	Little Martin Lake outlet	0	0	0	0	10	0	0
	Little Martin Lake	0	1,320	1,300	600	1,580	700	700
	Tokun Springs	0	0	0	0	0	0	0
	Tokun River	12	75	400	15	200	75	30
	Tokun Lake outlet	0	150	0	0	100	0	0
	Tokun Lake	1,100	1,300	3,100	1,000	2,300	2,400	2,700
Martin River Slough	Martin River Slough	460	162	20	0	NS	0	0
Copper River Aerial Survey Daily Total		20,966	22,348	20,695	7,085	22,347	22,515	20,370

–Continued–

Appendix C.1. (Page 3 of 5).

Copper River Delta[a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date 05 Oct.	Estimated Escapement Site[c]	Estimated Escapement System[d]
Eyak Lake	Eyak River	0		25,090
	West Shore beaches	300	14,200	
	Middle Arm beaches[b]	1,400	5,700	
	North Shore beaches	600	1,570	
	Hatchery Creek delta	300	600	
	Hatchery Creek	200	1,600	
	Power Creek delta	0	1,200	
	Power Creek	400	220	
Ibek Creek	Ibek Creek	0	40	40
Alaganik Slough	Alaganik Slough	0		10,325
	McKinley Lake	0	10,300	
	Salmon Creek, West Fork	NS	25	
	Salmon Creek, East Fork	NS	0	
26/27 Mile Creek	26/27 Mile Creek	20	1,420	1,420
39 Mile Creek	39 Mile Creek	0	4,500	4,500
Goat Mountain Creek	Goat Mountain Creek	0	620	620
Pleasant Creek	Pleasant Creek[b]	NS	1,567	1,567
Martin River	Martin River – lower	0	0	21,080
	Ragged Point River	0	0	
	Ragged Point Lake outlet	0	300	
	Ragged Point Lake	400	2,300	
	Martin River – upper[b]	0	1,400	
	Martin Lake outlet	0	800	
	Martin Lake	0	6,300	
	Martin Lake feeders	0	6,900	
	Pothole River	0	300	
	Pothole Lake outlet	0	800	
	Pothole Lake	2,900	200	
	Little Martin Lake outlet	0	20	
	Little Martin Lake	0	1,760	
	Tokun Springs	0	600	8,230
	Tokun River	0	430	
	Tokun Lake outlet	0	300	
	Tokun Lake	0	6,900	
Martin River Slough	Martin River Slough	0	3,955	3,955
Copper River Aerial Survey Daily Total		6,520	Copper River Aerial Survey Total	76,827

–Continued–

Appendix C.1. (Page 4 of 5).

Bering River [a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date						
		11 June	18 June	23 June	30 June	15 July	23 July	15 Aug.
Bering River	Bering River	600	NS	NC	750	2,200 *	NC	0
	Bering Lake	4,680	NC	3,100	18,700	14,180 *	4,120 +	150
	Dick Creek	0	NS	0	0	37,800 *	NC	2,100
	Shepherd Creek – lagoon	NS	NS	0	50 +	1,200 +*	NC	30
	Shepherd Creek	NS	NS	NS	NS	NS	200	200
	Carbon Creek	NS	NS	NS	NS	NS	150	NS
	Maxwell Creek	NS	NS	NS	NS	NS	0	0
	Trout Creek	NS	NS	NS	NS	NS	NS	0
	Clear Creek	NS	NS	NS	NS	NS	NS	150 *
	Kushtaka Lake	NS	NS	NS	NS	NS	0	20 *
	Shockum Creek	NS	NS	NS	NS	NS	0	80 *
Katalla River	Katalla River	NS	NS	NC	NS	265 *	NC	50
Bering River Aerial Survey Daily Index		5,280	0	3,100	19,500	55,645	4,470	2,780

Bering River [a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date						
		20 Aug.	29 Aug.	03 Sept.	08 Sept.	14 Sept.	22 Sept.	05 Oct.
Bering River	Bering River	NC	NS	0	NS	0	0	0
	Bering Lake	850	115	0	0	0	400	0
	Dick Creek	1,650	475	0	90	0	160	0
	Shepherd Creek – lagoon	NC	NS	NS	NS	NS	NS	NS
	Shepherd Creek	30	NS	NS	NS	NS	NS	NS
	Carbon Creek	350	NS	NS	NS	NS	NS	NS
	Maxwell Creek	NS	NS	NS	NS	NS	NS	NS
	Trout Creek	0	NS	NS	NS	NS	NS	NS
	Clear Creek	60	NS	NS	NS	NS	NS	NS
	Kushtaka Lake	43	NS	NS	NS	NS	NS	NS
	Shockum Creek	80	NS	NS	NS	NS	NS	NS
Katalla River	Katalla River	90	30	0	NS	0	0	0
Bering River Aerial Survey Daily Index		3,153	620	0	90	0	560	

–Continued–

Bering River [a] System and Drainage	Survey System	Estimated Escapement Site[c]	Estimated Escapement System[d]
Bering River	Bering River	2,200	54,180
	Bering Lake	14,180	
	Dick Creek	37,800	
	Shepherd Creek – lagoon	1,200	1,200
	Shepherd Creek		
	Carbon Creek		
	Maxwell Creek		
	Trout Creek		
	Clear Creek	150	150
	Kushtaka Lake	20	100
	Shockum Creek	80	
Katalla River	Katalla River	265	265
Bering River Aerial Survey Total			55,895
Copper River Aerial Survey Total			76,827
Copper and Bering River Aerial Survey Combined Total			132,722

[a] The survey sites represent most of the known sockeye salmon spawning locations in the Copper River Delta and Bering River drainages. Weather permitting, the sites are surveyed weekly. The surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement for coastal stocks but they have been used for that purpose in the absence of any other escapement estimating method. The abbrevations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions, SP= possible species confusion. The + sign after some counts indicates that the count is the minimum estimate of seen in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote b).

[b] The sites typically have very protracted run timing or two temporally segregated spawning populations at the same sites. Aerial counts from more than one day may be asterisked and used in the escapement estimate if the surveyor indicates that these counts represented different fish.

[c] The escapement estimates for each site are in the asterisked survey estimate. Where the survey site is a terminal spawning area the peak count is used; however, if the site is a schooling area for migratory fish bound for sites further upstream the count which minimizes possible duplication of counts across dates is selected.

[d] The sum of the estimates by site within a system

Appendix C.2. Aerial escapement indices for coho salmon returning to the Copper River delta and Bering River, by date and location, 1992.

Copper River Delta [a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date							
		15 Aug.	20 Aug.	29 Aug.	03 Sept.	08 Sept.	14 Sept.	22 Sept.	05 Oct.
Eyak Lake	Eyak River	NS	210 +	NS	NC	720 +	530	750 *	450
	West Shore Beaches	0	NS	900	1,600	4,100	4,900	4,660 *	1,200
	Middle Arm Beaches	0	0	0	0	0	0	0 *	0
	North Shore Beaches	0	0	0	0	400	300	300 *	600
	Hatchery Creek Delta	0	0	400	600	500	500	800 *	1,700
	Hatchery Creek	0	0	0	0	200	100	300 *	600
	Power Creek Delta	0	0	400	NS	500	200	700 *	1,400
	Power Creek	0	0	30	NS	100	100	300 *	1,000
Ibek Creek	Ibek Creek	0	75	NC	1,200	1,760 +	2,080	1,700	9,600 *
Scott River	Scott River	NS	0	20	0	NC	0	480 *	0
	Elsner River	NS	0	0	0	100	70	10 *	0
	Scott Lake	NS	0	165	3	NC	40	60 *	0
Alaganik Slough	Alaganik Slough	NS	0	NC	100	NC	50	800	300 *
	18/20 Mile Creek	0	85	305	300	530	460	520	615 *
	McKinley Lake	0	0	60	800 *	NS	150	100	150
	Salmon Creek, West Fork	0	0	0	0	NS	0	0	NS
	Salmon Creek, East Fork	0	0	0	0	NS	135	0	NS
26/27 Mile Creek	26/27 Mile Creek	0	NC	7	50	80	15	380	475 *
39 Mile Creek	39 Mile Creek	0	60	400	600	1,600	1,600	1,100 +	1,900 *
Goat Mountain Creek	Goat Mountain Creek	0	90	75	20	65	80	200	480 *
Pleasant Creek	Pleasant Creek	NS	NS	8	2	0	NS	NS	NS
Martin River	Martin River – Lower	15	395	350 +	450	900	1,600	500	200 *
	Ragged Point River	0	0	0	20	0	0	0	10 *
	Ragged Point Lake Outlet	0	0	0	0	0	0	0	0
	Ragged Point Lake	0	0	0	150	0	0	0	300 *
	Martin River – Upper	0	70	450 +	2,200	6,100	5,600	3,600	1,700 *
	Martin Lake Outlet	0	0	NS	0	NC	100	0	0
	Martin Lake	0	0	NS	0	NC	0	0	0
	Martin Lake Feeders	0	0	NS	20	0	0	0	65 *
	Pothole River	0	45	40	0	0	30	20	0
	Pothole Lake Outlet	0	0	0	0	0	0	0	300 *
	Pothole Lake	0	0	0	0	0	0	0	0
	Little Martin Lake Outlet	0	0	800	1,300	1,800	1,300	2,600	10,500 *
	Little Martin Lake	0	0	75	200	0	0	600	300 *
	Tokun Springs	0	35	120	10	80	400	280 *	100
	Tokun River	0	0	25	0	0	10	230 *	200
	Tokun Lake Outlet	0	0	0	0	0	0	0	20
	Tokun Lake	0	0	0	100	0	0	0	0
Martin River Slough	Martin River Slough	0	715	3,460	2,960	NS	6,440	6,580	8,140 *
Copper River Aerial Survey Daily Total		15	1,780	8,090	12,685	19,535	26,790	27,570	42,305

–Continued–

Copper River Delta [a] System and Drainage	Survey System	Estimated Escapement Site [c]	Estimated Escapement System [d]
Eyak Lake	Eyak River	750	7,810
	West shore Beaches	4,660	
	Middle Arm Beaches	0	
	North Shore Beaches	300	
	Hatchery Creek Delta	800	
	Hatchery Creek	300	
	Power Creek Delta	700	
	Power Creek	300	
Ibek Creek	Ibek Creek	9,600	9,600
Scott River	Scott River	480	550
	Elsner River	10	
	Scott Lake	60	
Alaganik Slough	Alaganik Slough	300	1,715
	18/20 Mile Creek	615	
	McKinley Lake	800	
	Salmon Creek, West Fork	0	
	Salmon Creek, East Fork	0	
26/27 Mile Creek	26/27 Mile Creek	475	475
39 Mile Creek	39 Mile Creek	1,900	1,900
Goat Mountain Creek	Goat Mountain Creek	480	480
Pleasant Creek	Pleasant Creek	8	8
Martin River	Martin River – Lower	200	200
	Ragged Point River	10	310
	Ragged Point Lake Outlet	0	
	Ragged Point Lake	300	
	Martin River – Upper	1,700	1,700
	Martin Lake Outlet	0	65
	Martin Lake	0	
	Martin Lake Feeders	65	
	Pothole River	0	300
	Pothole Lake Outlet	300	
	Pothole Lake	0	
	Little Martin Lake Outlet	10,500	10,800
	Little Martin Lake	300	
	Tokun Springs	280	510
	Tokun River	230	
	Tokun Lake Outlet	0	
	Tokun Lake	0	
Martin River Slough	Martin River Slough	8,140	8,140
Copper River Aerial Survey Total			44,563

–Continued–

Bering River [a] System and Drainage	Survey System	Aerial Escapement Indices by Survey Date						
		20 Aug.	29 Aug.	03 Sept.	08 Sept.	14 Sept.	22 Sept.	05 Oct.
Bering River	Bering River [e]	110 +	550	600	400 +	940	960	400 *
	Bering Lake	190	460	300	700	2,600	1,600	1,500 *
	Dick Creek	0	550	800	900	1,250	930	1,900 *
	Shepherd Creek – Lagoon	NC	NS	NS	NS	NS	NS	NS
	Shepherd Creek	0	NS	NS	NS	NS	NS	NS
	Carbon Creek	0	NS	NS	NS	NS	NS	NS
	Maxwell Creek	NS	NS	NS	NS	NS	NS	NS
Katalla River	Katalla River	350	1,260	900	NS	2,150	2,760 *	900
Lower Bering River	Gandil River	15	175	110	220	180	600 *	NS
	Nichawak River	110	1,970	650	1,100 *	800	700	NS
Controller Bay	Campbell River	0	0	100	120	50	160 *	NS
	Edwards River	65	625	650	2,500	2,400	3,600 *	NS
	Okalee River	0	1,025	600	590 +	1,300	2,160 *	NS
	Other Clear Streams	47	110	0	50	0	260 *	NS
Bering River Aerial Survey Daily Total		887	6,725	4,710	6,580	11,670	13,730	4,700

Bering River [a] System and Drainage	Survey System	Estimated Escapement	
		Site [c]	System [d]
Bering River	Bering River [e]	940	4,790
	Bering Lake	2,600	
	Dick Creek	1,250	
	Shepherd Creek – Lagoon	NS	
	Shepherd Creek	NS	
	Carbon Creek	NS	
	Maxwell Creek	NS	
Katalla River	Katalla River	2,760	2,760
Lower Bering River	Gandil River	600	2,570
	Nichawak River	1,970	
Controller Bay	Campbell River	160	6,180
	Edwards River	3,600	
	Okalee River	2,160	
	Other Clear Streams	260	
Bering River Aerial Survey Total			16,300
Copper River Aerial Survey Total			44,563
Copper and Bering River Aerial Survey Combined Total			60,863

[a] The survey sites represent most of the known coho salmon spawning locations in the Copper River delta and Bering River drainages. Weather permitting, the sites are surveyed weekly. The surveys provide information about the relative strength of escapement among years and within a year, time for spawning sites and relative escapement strength among sites. The indices are not intended to provide an actual estimate of escapement for coastal stocks but they have been used for that purpose in the absence of any other escapement estimating method. The abbrevations used in the following table have the following meaning: NS = no survey, NC = surveyed but no count due to poor conditions. The + sign after some counts indicates that the count is the minimum estimate of seen in less than ideal conditions. The symbol * indicates that this survey count was used as the peak survey for the site without duplication of counts for survey sites along migratory corridors (see footnote b).

[b] For systems not flown on any given survey the expected for that system was subtracted from the total anticipated for that survey.

[c] The escapement estimates for each site are in the asterisked survey estimate. Where the survey site is a terminal spawning area the peak count is used, however, if the site is a schooling area for migratory fish bound for sites further upstream, the count which minimizes possible duplication of counts across dates is selected.

[d] The sum of the estimates by site within a system

[e] Bering River counts include coho observed in the Don Miller Hill tributaries.

Appendix C.3. Estimated age and sex composition of sockeye salmon in the total indexed escapements to the Copper River delta and Bering River drainages, 1992.

		Brood Year and Age Group											
		1990	1989		1988			1987			1986		
		0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Copper River delta Escapements													
Stratum dates:	06/11 - 09/22												
Sampling dates:	06/27 - 09/23												
Sample size:	5,433												
Female	Percent of sample	0.0	0.3	0.0	2.4	10.1	0.0	0.0	26.7	0.3	0.0	0.6	40.4
	Number in escapement	0	176	0	1,633	6,753	0	0	17,884	182	0	408	27,035
Male	Percent of sample	0.1	5.7	1.4	1.2	31.6	0.0	0.0	16.7	0.4	0.0	0.1	57.4
	Number in escapement	71	3,780	970	835	21,161	18	6	11,186	270	0	94	38,390
Total	Percent of sample	0.1	5.9	1.4	3.7	41.7	0.0	0.0	43.5	0.7	0.0	0.8	100.0
	Number in escapement	71	3,956	970	2,468	27,916	18	6	29,071	452	0	503	66,897
	Standard error	31	228	128	173	496	18	6	480	86	7	88	
Bering River Escapements													
Stratum dates:	06/11 - 09/22												
Sampling dates:	07/10 - 08/20												
Sample size:	656												
Female	Percent of sample	0.0	0.0	0.0	0.2	2.8	0.0	0.0	39.7	0.0	0.0	0.8	44.5
	Number in escapement	0	1	0	112	1,506	0	0	21,606	4	0	454	24,222
Male	Percent of sample	0.0	0.8	0.0	0.8	0.0	0.0	0.0	49.7	0.2	0.0	0.8	56.5
	Number in escapement	0	449	0	449	0	0	0	27,040	112	0	449	30,743
Total	Percent of sample	0.0	0.8	0.0	0.6	7.2	0.0	0.0	89.5	0.2	0.0	1.6	100.0
	Number in escapement	0	449	0	337	3,927	0	0	48,695	112	0	898	54,417
	Standard error	0	223	4	193	637	0	0	755	112	0	314	
Combined Copper River delta and Bering River Escapements													
Strata Combined:	06/11 - 09/22												
Sampling dates:	06/27 - 08/20												
Sample size:	6,089												
Female	Percent of sample	0.0	0.1	0.0	1.4	6.8	0.0	0.0	32.6	0.2	0.0	0.7	42.3
	Number in escapement	0	178	0	1,744	8,259	0	0	39,490	186	0	862	51,257
Male	Percent of sample	0.1	3.5	0.8	1.1	17.4	0.0	0.0	31.5	0.3	0.0	0.4	57.0
	Number in escapement	71	4,228	970	1,283	21,161	18	6	38,227	382	0	543	69,133
Total	Percent of sample	0.1	3.6	0.8	2.3	26.2	0.0	0.0	64.1	0.5	0.0	1.2	100.0
	Number in escapement	71	4,405	970	2,804	31,843	18	6	77,766	564	0	1,400	121,314
	Standard error	31	451	132	366	1,133	18	6	1,236	198	7	402	

Appendix C.4. Estimated age and sex composition of sockeye salmon escapements to the Copper River delta, by location, 1992.

		Brood Year and Age Group											
		1990	1989		1988			1987			1986		
		0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Eyak Lake – South Beaches													
Stratum dates:	06/11 – 10/05												
Sampling dates:	07/20												
Sample size:	513												
Female	Percent of sample	0.0	0.4	0.0	1.8	4.1	0.0	0.0	31.0	0.2	0.0	0.4	37.8
	Number in escapement	0	55	0	249	581	0	0	4,401	28	0	55	5,370
Male	Percent of sample	0.0	4.9	0.0	1.6	43.5	0.0	0.0	12.1	0.2	0.0	0.0	62.2
	Number in escapement	0	692	0	221	6,173	0	0	1,716	28	0	0	8,830
Total	Percent of sample	0.0	5.3	0.0	3.3	47.6	0.0	0.0	43.1	0.4	0.0	0.4	100.0
	Number in escapement	0	747	0	471	6,754	0	0	6,117	55	0	55	14,200
	Standard error	0	140	0	112	313	0	0	311	39	0	39	

–Continued–

		Brood Year and Age Group											
		1990	1989		1988			1987			1986		
		0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Eyak Lake – Middle Arm													
Stratum dates:	06/11 – 06/22												
Sampling dates:	06/16 – 06/16												
Sample size:	209												
Female	Percent of sample	0.0	0.0	0.0	5.3	0.0	0.0	0.0	42.1	0.0	0.0	0.0	47.4
	Number in escapement	0	0	0	68	0	0	0	547	0	0	0	616
Male	Percent of sample	0.0	0.0	0.0	3.8	1.4	0.0	0.5	46.9	0.0	0.0	0.0	52.6
	Number in escapement	0	0	0	50	19	0	6	610	0	0	0	684
Total	Percent of sample	0.0	0.0	0.0	9.1	1.4	0.0	0.5	89.0	0.0	0.0	0.0	100.0
	Number in escapement	0	0	0	118	19	0	6	1,157	0	0	0	1,300
	Standard error	0	0	0	26	11	0	6	28	0	0	0	
Stratum dates:	06/23 – 09/03												
Sampling dates:	07/22 – 07/22												
Sample size:	310												
Female	Percent of sample	0.0	0.0	0.0	1.9	1.6	0.0	0.0	48.7	0.0	0.0	1.6	53.9
	Number in escapement	0	0	0	85	71	0	0	2,143	0	0	71	2,370
Male	Percent of sample	0.0	0.3	0.0	0.3	21.9	0.0	0.0	22.9	0.3	0.0	0.3	46.1
	Number in escapement	0	14	0	14	965	0	0	1,008	14	0	14	2,030
Total	Percent of sample	0.0	0.3	0.0	2.3	23.5	0.0	0.0	71.6	0.3	0.0	1.9	100.0
	Number in escapement	0	14	0	99	1,036	0	0	3,151	14	0	85	4,400
	Standard error	0	14	0	37	106	0	0	113	14	0	34	
Stratum dates:	09/04 – 10/05												
Sampling dates:	09/23 – 09/23												
Sample size:	186												
Female	Percent of sample	0.0	0.0	0.0	0.5	10.2	0.0	0.0	52.7	2.2	0.0	5.9	71.5
	Number in escapement	0	0	0	18	337	0	0	1,739	71	0	195	2,360
Male	Percent of sample	0.0	0.0	1.1	0.0	7.0	0.5	0.0	17.2	1.1	0.0	1.6	28.5
	Number in escapement	0	0	35	0	231	18	0	568	35	0	53	940
Total	Percent of sample	0.0	0.0	1.1	0.5	17.2	0.5	0.0	69.9	3.2	0.0	7.5	100.0
	Number in escapement	0	0	35	18	568	18	0	2,306	106	0	248	3,300
	Standard error	0	0	25	18	92	18	0	111	43	0	64	
Strata Combined:	06/11 – 10/05												
Sampling dates:	06/16 – 09/23												
Sample size:	705												
Female	Percent of sample	0.0	0.0	0.0	1.9	4.5	0.0	0.0	49.2	0.8	0.0	3.0	59.4
	Number in escapement	0	0	0	171	408	0	0	4,429	71	0	266	5,346
Male	Percent of sample	0.0	0.2	0.4	0.7	13.5	0.2	0.1	24.3	0.6	0.0	0.7	40.6
	Number in escapement	0	14	35	64	1,214	18	6	2,185	50	0	67	3,654
Total	Percent of sample	0.0	0.2	0.4	2.6	18.0	0.2	0.1	73.5	1.3	0.0	3.7	100.0
	Number in escapement	0	14	35	235	1,623	18	6	6,614	121	0	334	9,000
	Standard error	0	14	25	49	141	18	6	161	45	0	73	

–Continued–

		Brood Year and Age Group										
		1990	1989		1988			1987			1986		
		0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Eyak Lake – Hatchery Creek													
Stratum dates:	06/23 – 10/05												
Sampling dates:	07/14 – 07/14												
Sample size:	294												
Female	Percent of sample	0.0	0.0	0.0	11.6	1.0	0.0	0.0	49.0	0.0	0.0	0.0	61.6
	Number in escapement	0	0	0	139	12	0	0	588	0	0	0	739
Male	Percent of sample	0.0	0.3	0.3	5.8	4.8	0.0	0.0	27.2	0.0	0.0	0.0	38.4
	Number in escapement	0	4	4	69	57	0	0	327	0	0	0	461
Total	Percent of sample	0.0	0.3	0.3	17.3	5.8	0.0	0.0	76.2	0.0	0.0	0.0	100.0
	Number in escapement	0	4	4	208	69	0	0	914	0	0	0	1,200
	Standard error	0	4	4	27	16	0	0	30	0	0	0	
Stratum dates:	06/23 – 10/05												
Sampling dates:	08/05 – 08/05												
Sample size:	76												
Female	Percent of sample	0.0	0.0	0.0	1.3	1.3	0.0	0.0	50.0	0.0	0.0	1.3	53.9
	Number in escapement	0	0	0	5	5	0	0	200	0	0	5	216
Male	Percent of sample	0.0	0.0	0.0	5.3	5.3	0.0	0.0	34.2	0.0	0.0	1.3	46.1
	Number in escapement	0	0	0	21	21	0	0	137	0	0	5	184
Total	Percent of sample	0.0	0.0	0.0	6.6	6.6	0.0	0.0	84.2	0.0	0.0	2.6	100.0
	Number in escapement	0	0	0	26	26	0	0	337	0	0	11	400
	Standard error	0	0	0	11	11	0	0	17	0	0	7	
Strata Combined:	06/23 – 10/05												
Sampling dates:	07/14 – 08/05												
Sample size:	370												
Female	Percent of sample	0.0	0.0	0.0	9.0	1.1	0.0	0.0	49.2	0.0	0.0	0.3	59.7
	Number in escapement	0	0	0	144	18	0	0	788	0	0	5	955
Male	Percent of sample	0.0	0.3	0.3	5.7	4.9	0.0	0.0	29.0	0.0	0.0	0.3	40.3
	Number in escapement	0	4	4	90	78	0	0	463	0	0	5	645
Total	Percent of sample	0.0	0.3	0.3	14.7	6.0	0.0	0.0	78.2	0.0	0.0	0.7	100.0
	Number in escapement	0	4	4	234	96	0	0	1,251	0	0	11	1,600
	Standard error	0	4	4	29	20	0	0	34	0	0	7	
Eyak Lake Total													
Strata Combined:	06/11 – 10/05												
Sampling dates:	06/16 – 09/23												
Sample size:	1,588												
Female	Percent of sample	0.0	0.5	0.0	4.8	8.6	0.0	0.0	82.4	0.8	0.0	2.8	100.0
	Number in escapement	0	55	0	564	1,007	0	0	9,618	99	0	327	11,670
Male	Percent of sample	0.0	5.4	0.3	2.9	56.9	0.1	0.0	33.2	0.6	0.0	0.6	100.0
	Number in escapement	0	710	40	376	7,465	18	6	4,365	77	0	73	13,130
Total	Percent of sample	0.0	3.1	0.2	3.8	34.2	0.1	0.0	56.4	0.7	0.0	1.6	100.0
	Number in escapement	0	766	40	940	8,472	18	6	13,983	176	0	399	24,800
	Standard error	0	141	25	126	344	18	6	352	60	0	83	

–Continued–

		Brood Year and Age Group											
		1990	1989		1988			1987			1986		
		0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
McKinley Lake													
Stratum dates:	06/30 – 10/05												
Sampling dates:	07/16												
Sample size:	658												
Female	Percent of sample	0.0	0.0	0.0	1.8	8.7	0.0	0.0	21.1	0.5	0.0	0.2	32.2
	Number in escapement	0	0	0	188	894	0	0	2,181	47	0	16	3,327
Male	Percent of sample	0.0	2.7	0.8	0.5	46.0	0.0	0.0	16.6	1.2	0.0	0.0	67.8
	Number in escapement	0	282	78	47	4,755	0	0	1,710	126	0	0	6,998
Total	Percent of sample	0.0	2.7	0.8	2.3	54.7	0.0	0.0	37.7	1.7	0.0	0.2	100.0
	Number in escapement	0	282	78	235	5,649	0	0	3,891	173	0	16	10,325
	Standard error	0	66	35	60	201	0	0	195	52	0	16	
27–Mile Slough – Confluence with Copper River													
Stratum dates:	06/11 – 10/05												
Sampling dates:	07/08												
Sample size:	409												
Female	Percent of sample	0.0	0.2	0.0	8.3	1.7	0.0	0.0	26.9	0.2	0.0	0.0	37.4
	Number in escapement	0	3	0	118	24	0	0	382	3	0	0	531
Male	Percent of sample	0.0	31.5	0.7	3.9	20.3	0.0	0.0	6.1	0.0	0.0	0.0	62.6
	Number in escapement	0	448	10	56	288	0	0	87	0	0	0	889
Total	Percent of sample	0.0	31.8	0.7	12.2	22.0	0.0	0.0	33.0	0.2	0.0	0.0	100.0
	Number in escapement	0	451	10	174	312	0	0	469	3	0	0	1,420
	Standard error	0	33	6	23	29	0	0	33	3	0	0	
39–Mile Creek													
Stratum dates:	06/30 – 09/22												
Sampling dates:	08/14												
Sample size:	318												
Female	Percent of sample	0.0	1.3	0.0	0.6	15.1	0.0	0.0	13.5	0.0	0.0	0.0	30.5
	Number in escapement	0	57	0	28	679	0	0	608	0	0	0	1,373
Male	Percent of sample	1.6	12.3	10.1	0.3	38.1	0.0	0.0	6.9	0.3	0.0	0.0	69.5
	Number in escapement	71	552	453	14	1,712	0	0	311	14	0	0	3,127
Total	Percent of sample	1.6	13.5	10.1	0.9	53.1	0.0	0.0	20.4	0.3	0.0	0.0	100.0
	Number in escapement	71	608	453	42	2,392	0	0	920	14	0	0	4,500
	Standard error	31	86	76	24	126	0	0	102	14	0	0	
Pleasant Creek													
Stratum dates:	06/23 – 07/15												
Sampling dates:	07/02												
Sample size:	217												
Female	Percent of sample	0.0	0.5	0.0	4.1	13.8	0.0	0.0	24.0	1.4	0.0	0.0	43.8
	Number in escapement	0	7	0	65	217	0	0	376	22	0	0	686
Male	Percent of sample	0.0	30.0	0.0	1.8	12.9	0.0	0.0	6.5	0.0	0.5	0.0	51.6
	Number in escapement	0	469	0	29	202	0	0	101	0	7	0	809
Total	Percent of sample	0.0	30.9	0.0	6.5	28.6	0.0	0.0	31.3	1.8	0.5	0.5	100.0
	Number in escapement	0	484	0	101	448	0	0	491	29	7	7	1,567
	Standard error	0	49	0	26	48	0	0	49	14	7	7	

–Continued–

		Brood Year and Age Group											
		1990	1989		1988			1987			1986		
		0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Ragged Point River – Confluence with Martin River													
Stratum dates:	08/15 – 10/05												
Sampling dates:	08/07												
Sample size:	345												
Female	Percent of sample	0.0	0.9	0.0	2.3	5.8	0.0	0.0	36.5	0.3	0.0	1.4	47.2
	Number in escapement	0	23	0	60	151	0	0	950	8	0	38	1,228
Male	Percent of sample	0.0	14.2	3.2	1.4	11.6	0.0	0.0	21.7	0.3	0.0	0.3	52.8
	Number in escapement	0	369	83	38	301	0	0	565	8	0	8	1,372
Total	Percent of sample	0.0	15.1	3.2	3.8	17.4	0.0	0.0	58.3	0.6	0.0	1.7	100.0
	Number in escapement	0	392	83	98	452	0	0	1,515	15	0	45	2,600
	Standard error	0	50	25	27	53	0	0	69	11	0	18	
Martin Lake													
Stratum dates:	06/11 – 07/23												
Sampling dates:	07/02 – 07/02												
Sample size:	454												
Female	Percent of sample	0.0	0.2	0.0	0.2	13.0	0.0	0.0	25.8	0.2	0.0	0.4	39.9
	Number in escapement	0	7	0	7	409	0	0	812	7	0	14	1,256
Male	Percent of sample	0.0	4.0	0.2	0.7	47.6	0.0	0.0	6.2	1.1	0.0	0.4	60.1
	Number in escapement	0	125	7	21	1,499	0	0	194	35	0	14	1,894
Total	Percent of sample	0.0	4.2	0.2	0.9	60.6	0.0	0.0	31.9	1.3	0.0	0.9	100.0
	Number in escapement	0	132	7	28	1,908	0	0	1,006	42	0	28	3,150
	Standard error	0	30	7	14	72	0	0	69	17	0	14	
Stratum dates:	07/24 – 09/22												
Sampling dates:	08/08 – 08/08												
Sample size:	296												
Female	Percent of sample	0.0	0.0	0.0	1.4	19.9	0.0	0.0	23.0	0.0	0.0	0.0	44.3
	Number in escapement	0	0	0	43	628	0	0	724	0	0	0	1,394
Male	Percent of sample	0.0	3.4	2.7	0.3	47.3	0.0	0.0	1.7	0.3	0.0	0.0	55.7
	Number in escapement	0	106	85	11	1,490	0	0	53	11	0	0	1,756
Total	Percent of sample	0.0	3.4	2.7	1.7	67.2	0.0	0.0	24.7	0.3	0.0	0.0	100.0
	Number in escapement	0	106	85	53	2,118	0	0	777	11	0	0	3,150
	Standard error	0	33	30	24	86	0	0	79	11	0	0	
Strata Combined:	06/11 – 09/22												
Sampling dates:	07/02 – 08/08												
Sample size:	750												
Female	Percent of sample	0.0	0.1	0.0	0.8	16.5	0.0	0.0	24.4	0.1	0.0	0.2	42.1
	Number in escapement	0	7	0	50	1,037	0	0	1,535	7	0	14	2,650
Male	Percent of sample	0.0	3.7	1.5	0.5	47.4	0.0	0.0	3.9	0.7	0.0	0.2	57.9
	Number in escapement	0	231	92	31	2,989	0	0	247	45	0	14	3,650
Total	Percent of sample	0.0	3.8	1.5	1.3	63.9	0.0	0.0	28.3	0.8	0.0	0.4	100.0
	Number in escapement	0	238	92	81	4,026	0	0	1,783	52	0	28	6,300
	Standard error	0	44	31	27	112	0	0	105	20	0	14	

–Continued–

		Brood Year and Age Group											
		1990	1989		1988			1987			1986		
		0.1	0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3	Total
Little Martin Lake													
Stratum dates:	06/30 – 09/22												
Sampling dates:	08/11												
Sample size:	90												
Female	Percent of sample	0.0	0.0	0.0	1.1	10.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1
	Number in escapement	0	0	0	36	320	0	0	0	0	0	0	356
Male	Percent of sample	0.0	6.7	6.7	0.0	73.3	0.0	0.0	2.2	0.0	0.0	0.0	88.9
	Number in escapement	0	213	213	0	2,347	0	0	71	0	0	0	2,844
Total	Percent of sample	0.0	6.7	6.7	1.1	83.3	0.0	0.0	2.2	0.0	0.0	0.0	100.0
	Number in escapement	0	213	213	36	2,667	0	0	71	0	0	0	3,200
	Standard error	0	85	85	36	126	0	0	50	0	0	0	
Tokun Lake													
Stratum dates:	06/30 – 09/22												
Sampling dates:	08/18												
Sample size:	492												
Female	Percent of sample	0.0	0.2	0.0	0.8	30.9	0.0	0.0	22.2	0.2	0.0	0.0	54.3
	Number in escapement	0	17	0	67	2,543	0	0	1,823	17	0	0	4,466
Male	Percent of sample	0.0	0.0	0.0	0.4	2.4	0.0	0.0	42.9	0.0	0.0	0.0	45.7
	Number in escapement	0	0	0	33	201	0	0	3,530	0	0	0	3,764
Total	Percent of sample	0.0	0.2	0.0	1.2	33.3	0.0	0.0	65.0	0.2	0.0	0.0	100.0
	Number in escapement	0	17	0	100	2,743	0	0	5,353	17	0	0	8,230
	Standard error	0	17	0	41	175	0	0	177	17	0	0	
Martin River Slough													
Stratum dates:	06/11 – 08/29												
Sampling dates:	06/26 – 06/27												
Sample size:	566												
Female	Percent of sample	0.0	0.4	0.0	13.1	2.1	0.0	0.0	19.3	0.0	0.0	0.4	35.2
	Number in escapement	0	14	0	517	84	0	0	762	0	0	14	1,391
Male	Percent of sample	0.0	23.9	0.0	6.0	27.6	0.0	0.0	7.4	0.0	0.0	0.0	64.8
	Number in escapement	0	943	0	238	1,090	0	0	293	0	0	0	2,564
Total	Percent of sample	0.0	24.2	0.0	19.1	29.7	0.0	0.0	26.7	0.0	0.0	0.4	100.0
	Number in escapement	0	957	0	755	1,174	0	0	1,055	0	0	14	3,955
	Standard error	0	71	0	65	76	0	0	74	0	0	10	
Copper River Delta Escapements													
Strata Combined:	06/11 – 10/05												
Sampling dates:	06/16 – 09/23												
Sample size:	5,433												
Female	Percent of sample	0.0	0.3	0.0	2.4	10.1	0.0	0.0	26.7	0.3	0.0	0.6	40.4
	Number in escapement	0	176	0	1,633	6,753	0	0	17,884	182	0	408	27,035
Male	Percent of sample	0.1	5.7	1.4	1.2	31.6	0.0	0.0	16.7	0.4	0.0	0.1	57.4
	Number in escapement	71	3,780	970	835	21,161	18	6	11,186	270	0	94	38,390
Total	Percent of sample	0.1	5.9	1.4	3.7	41.7	0.0	0.0	43.5	0.7	0.0	0.8	100.0
	Number in escapement	71	3,956	970	2,468	27,916	18	6	29,071	452	0	503	66,897
	Standard error	31	228	128	173	496	18	6	480	86	7	88	

Appendix C.5 Estimated age and sex composition of sockeye salmon escapements to the Bering River drainage, by location, 1992.

		Brood Year and Age Group							
		1989		1988		1987		1986	
		0.2	1.1	0.3	1.2	1.3	2.2	2.3	Total
Bering Lake									
Stratum dates:	06/11 – 09/22								
Sampling dates:	07/10								
Sample size:	485								
Female	Percent of sample	0.0	0.0	0.2	2.7	39.8	0.0	0.8	43.5
	Number in escapement	0	0	112	1,452	21,560	0	447	23,571
Male	Percent of sample	0.8	0.0	0.4	4.5	49.7	0.2	0.8	56.5
	Number in escapement	447	0	223	2,458	26,922	112	447	30,609
Total	Percent of sample	0.8	0.0	0.6	7.2	89.5	0.2	1.6	100.0
	Number in escapement	447	0	335	3,910	48,483	112	894	54,180
	Standard error	223	0	193	637	755	112	314	
Kushtaka Lake									
Stratum dates:	07/23 – 08/29								
Sampling dates:	08/20								
Sample size:	171								
Female	Percent of sample	0.6	0.0	0.0	22.8	19.3	1.8	2.9	47.4
	Number in escapement	1	0	0	54	46	4	7	112
Male	Percent of sample	0.0	4.7	0.6	24.0	18.7	4.1	0.6	52.6
	Number in escapement	0	11	1	57	44	10	1	125
Total	Percent of sample	0.6	4.7	0.6	46.8	38.0	5.8	3.5	100.0
	Number in escapement	1	11	1	111	90	14	8	237
	Standard error	1	4	1	9	9	4	3	
Combined Bering River Escapements									
Strata Combined:	06/11 – 09/22								
Sampling dates:	07/10 – 08/20								
Sample size:	656								
Female	Percent of sample	0.0	0.0	0.2	2.8	39.7	0.0	0.8	43.5
	Number in escapement	1	0	112	1,506	21,606	4	454	23,683
Male	Percent of sample	0.8	0.0	0.4	4.6	49.6	0.2	0.8	56.5
	Number in escapement	447	11	225	2,514	26,967	121	448	30,734
Total	Percent of sample	0.8	0.0	0.6	7.4	89.3	0.2	1.7	100.0
	Number in escapement	448	11	337	4,021	48,573	126	902	54,417
	Standard error	223	4	193	637	755	112	314	

Appendix D
Salmon Escapements to the Upper Copper River

Appendix D.1. Daily Copper River salmon escapement estimates at the Miles Lake Sonar site, 1992.

Date	North Bank	South Bank	Daily	Cumulative
05/22	0		0	0
05/22	0		0	0
05/23	0		0	0
05/24	0		0	0
05/25	0		0	0
05/26	0		0	0
05/27	210	1,016	1,226	1,226
05/28	328	1,103	1,431	2,657
05/29	380	1,982	2,362	5,019
05/30	548	5,188	5,736	10,755
05/31	217	7,714 [a]	7,931	18,686
06/01	177	6,433	6,610	25,296
06/02	260	7,659	7,919	33,215
06/03	893	10,642	11,535	44,750
06/04	563	7,358	7,921	52,671
06/05	152	9,143	9,295	61,966
06/06	189	14,363	14,552	76,518
06/07	147	16,587	16,734	93,252
06/08	122	17,607	17,729	110,981
06/09	92	20,627	20,719	131,700
06/10	41	23,389	23,430	155,130
06/11	22	18,569	18,591	173,721
06/12	57	14,039	14,096	187,817
06/13	43	18,214	18,257	206,074
06/14	119	20,337	20,456	226,530
06/15	248	23,709	23,957	250,487
06/16	245	13,669	13,914	264,401
06/17	157	14,352	14,509	278,910
06/18	290	14,603	14,893	293,803
06/19	151	12,173	12,324	306,127
06/20	288	19,192	19,480	325,607
06/21	216	16,666	16,882	342,489
06/22	130	9,322	9,452	351,941
06/23	81	7,153	7,234	359,175
06/24	99	6,220	6,319	365,494
06/25	109	6,566	6,675	372,169
06/26	31	7,149	7,180	379,349
06/27	141	6,125	6,266	385,615
06/28	128	7,956	8,084	393,699
06/29	91	9,167	9,258	402,957
06/30	75	7,341	7,416	410,373

–Continued–

Date	North Bank	South Bank	Daily	Cumulative
07/01	152	6,968	7,120	417,493
07/02	217	5,374	5,591	423,084
07/03	222	4,419	4,641	427,725
07/04	127	5,286	5,413	433,138
07/05	138	4,286	4,424	437,562
07/06	246	6,741	6,987	444,549
07/07	350	7,011	7,361	451,910
07/08	507	5,251	5,758	457,668
07/09	562	11,375	11,937	469,605
07/10	417	8,722	9,139	478,744
07/11	330	8,050	8,380	487,124
07/12	477	7,482	7,959	495,083
07/13	646	6,095	6,741	501,824
07/14	453	8,121	8,574	510,398
07/15	364	8,607	8,971	519,369
07/16	504	7,179	7,683	527,052
07/17	492	6,226	6,718	533,770
07/18	480	8,327	8,807	542,577
07/19	413 [b]	8,202	8,615	551,192
07/20	273	6,829	7,102	558,294
07/21	188	4,710	4,898	563,192
07/22	177	4,435	4,612	567,804
07/23	209	5,217	5,426	573,230
07/24	147	3,674	3,821	577,051
07/25	115	2,869	2,984	580,035
07/26	131	3,281	3,412	583,447
07/27	139	3,480	3,619	587,066
07/28	123	3,082	3,205	590,271
07/29	152	3,802	3,954	594,225
07/30	149	3,723	3,872	598,097
07/31	148	3,707	3,855	601,952
Total	16,088	585,864	601,952	

[a] Went to permanent substrate.

[b] North bank pulled; all counts after 19 July are interpolated. North bank counts are derived from the average percentage of north versus south bank counts of 3.9 percent.

Appendix D.2. Daily escapement counts of sockeye salmon through the Long Lake weir, 1992.

Date	Escapement [a] Daily	Cumulative	Date	Escapement [a] Daily	Cumulative
07/26	0	0	08/28	0	3,272
07/27	0	0	08/29	1,214	4,486
07/28	0	0	08/30	488	4,974
07/29	0	0	08/31	24	4,998
07/30	0	0	09/01	50	5,048
07/31	0	0	09/02	1,840	6,888
08/01	0	0	09/03	736	7,624
08/02	0	0	09/04	1	7,625
08/03	0	0	09/05	14	7,639
08/04	0	0	09/06	12	7,651
08/05	0	0	09/07	3	7,654
08/06	37	37	09/08	539	8,193
08/07	288	325	09/09	4	8,197
08/08	303	628	09/10	43	8,240
08/09	0	628	09/11	0	8,240
08/10	0	628	09/12	0	8,240
08/11	0	628	09/13	356	8,596
08/12	0	628	09/14	0	8,596
08/13	148	776	09/15	0	8,596
08/14	607	1,383	09/16	0	8,596
08/15	91	1,474	09/17	14	8,610
08/16	328	1,802	09/18	700	9,310
08/17	396	2,198	09/19	772	10,082
08/18	0	2,198	09/20 [b]	39	10,121
08/19	258	2,456	09/21	9	10,130
08/20	303	2,759	09/22	11	10,141
08/21	310	3,069			
08/22	69	3,138			
08/23	0	3,138			
08/24	0	3,138			
08/25	94	3,232			
08/26	0	3,232			
08/27	40	3,272			
			Total		10,141

[a] Data collection by Cliff Collins and family of Long Lake, Alaska.

[b] Fifty coho salmon passed weir.

Appendix D.3. Aerial escapement estimates of chinook salmon runs to selected upper Copper River drainages, by date and location, 1992.

Location	Survey date								Peak count	
	7/01	7/23	7/24	7/29	7/30	8/06	8/10	8/11	Site	System
Tonsina River					107			53	160	180
Lower Tonsina Creek										
Little Tonsina River										
Fourth of July Creek										
Quartz Creek										
Tonsina Lake										
Bernard Creek								3	3	
Greyling Creek								17	17	
Dust Creek										
Unnamed Creek										
Klutina River										26
Manker Creek								14	14	
Mahlo Creek								0	0	
Island Lake										
1884 Lake										
Klutina Lake										
Curtis Creek										
St. Anne Creek								12	12	
Klutina Inlet										
Tazlina River										162
Moose Creek										
Eight Mile Creek										
Nickel Creek										
Durham Creek										
Upper Mendeltna Creek	0								0	
Mendeltna Creek								83	83	
Kiana Creek								79	79	
Upper Kiana Lake								0	0	
Tazlina Lake										
Gulkana River										1,204
Mouth to West Fork										
West Fork										
Moose Cr – Monsoon L		19		11					30	
Unnamed Tributary (new)	7								7	
Monsoon Lake										
Moose Creek										
Moose Cr – Keg Cr										
Keg Creek Mouth										
Keg Creek										
Victor Creek										
West Fork to Middle Fk.		444		160		64	322		990	
Middle Fork										
Dickey Lake										
Dickey L. – Swede Cr.		27		32		4	4		67	
Swede Lake										
Swede Cr. – E. Fork		20		57		6	9		92	
Hungry Hollow Creek		12		6					18	
Ten Mile Lake										

–Continued–

Appendix D.3. (Page 2 of 2)

Location	Survey date								Peak count	
	7/01	7/23	7/24	7/29	7/30	8/06	8/10	8/11	Site	System
East Fork										156
East Fork to Paxson Lake		10		77		20	49		156	
Paxson Lake										
Paxson Lake inlet										
Inlet to Mud Creek										
Mud Creek and Lake										
Mud Creek to Summit Lake										
Fish Creek										
Fish Lake										
Summit Lake										
Gunn Creek										
Gunn Lake Creek										
Gakona River										0
Unnamed Creek										
Spring Creek										
Alder Creek										
Headwater Spring										
Drop Creek			0						0	0
Tributary near Boulder Cr.			1						1	1
Sinona Creek										
Bear Creek										0
Chistochina River										237
Chistochina R. – E. Fork										
East Fork			88	43					131	
Eagle Creek			74	32					106	
Unnamed fork Eagle Creek										
Mankonen Lake										
Slana River										7
Mentasta Lake										
Fish Creek										
Bad Crossing #1										
Bad Crossing #2										
Granite Creek										
Bone Creek			7						7	
Slana Sloughs										
Suslositna Creek										
Suslositna Lake										
Suslota Lake										
Smith Creek										
Smith Lake										
Natat Creek										
Indian River				1					1	1
Ahtell Creek										0
Tanada Creek										0
Tanada Lake										
Tanada Lake outlet										
Copper Creek										0
Copper Lake										
Tebay River										0
Chokosna River										0
Lakina River										0
Long Lake										
Nizina River										10
Spruce Point Creek										
Trumpeter Lake										
Lake Creek										
Clear Creek (Chitina R.)										0
Tana River										10
Tana R. Clear Channels					10				10	
Tana Lake Inlet										
West Fork Channels										
Chakina River										0
Monahan Creek										
Upper Copper River Systems Total										1,994

Appendix D.4. Aerial escapement estimates of sockeye salmon runs to selected upper Copper River drainages, by date and location, 1992

Location	Survey Date															Peak count	
	7/01	7/23	7/24	7/29	7/30	8/06	8/10	8/11	8/27	9/03	9/04	9/11	9/16	9/22	10/14	Site	System
Bremner River																	3,064
Peninsula Lake					10				125							135	
Little Bremner River																	
Steamboat Lake					650				175							825	
Eagle Creek																	
Salmon Creek					1,500				550							2,050	
Price Creek					15				0							15	
Unnamed Creek #1					30				7							37	
Unnamed Creek #2					2				0							2	
Tasnuna River									0							0	0
Whiting Falls Creek									0							0	0
Unnamed Tributary					50				0							50	50
Tiekel Lake					90				70							160	160
Swan Lakes																	470
Lake #1					250				5							255	
Lake #2					150				30							180	
Lake #3					25				10							35	
Lake #4					0				0							0	
Uranatina River									30							30	30
Tonsina River																	1,350
Lower Tonsina Creek																	
Little Tonsina River								0								0	
Fourth of July Creek																	
Quartz Creek																	
Tonsina Lake															1,350	1,350	
Bernard Creek								0								0	
Greyling Creek								0								0	
Dust Creek																	
Unnamed Creek																	
Klutina River																	3,917
Manker Creek																	
Mahlo Creek								250								250	
Island Lake									2,550						450	3,000	
1884 Lake									0							0	
Klutina Lake																	
Hallet Slough Beach									215							215	
Curtis Creek																	
St. Anne Creek								450								450	
Klutina Inlet									2							2	
Tazlina River																	1,837
Moose Creek																	
Eight Milw Creek																	
Nickel Creek																	
Durham Creek																	
Upper Mendeltna Creek	72															72	
Mendeltna Creek								1,750			15					1,765	
Kiana Creek								0								0	
Upper Kiana Lake								0								0	
Tazlina Lake																	

–Continued–

Appendix D.4. (Page 2 of 3)

Location	Survey Date															Peak count	
	7/01	7/23	7/24	7/29	7/30	8/06	8/10	8/11	8/27	9/03	9/04	9/11	9/16	9/22	10/14	Site	System
Gulkana River																	41,722
Mouth to West Fork																	
West Fork																	
Dog Creek		0								5,900		600	450	2,300		9,250	
Crosswind Lake										6,600			17,654			24,254	
Moose Cr – Monsoon L		775		180												955	
Unnamed Tributary (new)		50														50	
Monsoon Lake																	
Moose Creek				0												0	
Moose Cr – Keg Cr																	
Keg Creek Mouth		525		230												755	
Keg Creek		630		260												890	
Victor Creek		1,165														1,165	
West Fork to Middle Fk.		1,125		260		15	300									1,700	
Middle Fork																	
Dickey Lake		45		46			27									118	
Dickey L. – Swede Cr.																	
Swede Lake		325		550			875			70						1,820	
Swede Cr. – E. Fork		490		230												720	
Hungry Hollow Creek		30		15												45	
Ten Mile Lake																	
East Fork																	45,832
East Fork to Paxson Lake		350		200			750			950						2,250	
Paxson Lake																	
Paxson Lake inlet			3,200	2,000			500			2,800			2,300	600		11,400	
Inlet to Mud Creek			2,450	3,700			6,450			800			0	325		13,725	
Mud Creek and Lake			10	22			425			85						542	
Mud Creek to Summit Lake			325	865			3,800			1,850			2,550	2,800		12,190	
Fish Creek																	
Fish Lake			500								4,250					4,750	
Summit Lake										0			0	0		0	
Gunn Creek			15	40			0			25			305	265		650	
Gunn Lake Creek			65	90			170						0			325	
Gakona River																	60
Unnamed Creek																	
Spring Creek																	
Alder Creek			25	35												60	
Headwater Spring																	
Drop Creek			0													0	0
Tributary near Boulder Cr.			0													0	0
Sinona Creek																	
Bear Creek																	0
Chistochina River																	63
Chistochina R. – E. Fork																	
East Fork			18	10												28	
Eagle Creek			15	20												35	
Unnamed fork Eagle Creek																	
Mankonen Lake																	

–Continued–

Appendix D.4. (Page 3 of 3)

Location	Survey Date															Peak count	
	7/01	7/23	7/24	7/29	7/30	8/06	8/10	8/11	8/27	9/03	9/04	9/11	9/16	9/22	10/14	Site	System
Slana River																	4,275
Mentasta Lake			450	600						150						1,200	
Fish Creek			425	480												905	
Bad Crossing #1			150	15												165	
Bad Crossing #2			350	50												400	
Granite Creek																	
Bone Creek			100													100	
Slana Sloughs																	
Suslositna Creek																	
Suslositna Lake				80												80	
Suslota Lake				75						1,350						1,425	
Smith Creek																	
Smith Lake																	
Natat Creek																	
Indian River				0												0	0
Ahtell Creek																	0
Tanada Creek			0	0												0	6,600
Tanada Lake										2,200			2,250			4,450	
Tanada Lake outlet										950			1,200			2,150	
Copper Creek										10			5			15	368
Copper Lake										171			182			353	
Lakina River																	1,500
Long Lake									450						1,050	1,500	
Tana River																	940
Tana R. clear channels					160				665							825	
Tana Lake inlet					50				10							60	
West Fork channels					30				25							55	
Upper Copper River Systems Total																	112,238

Appendix D.5. Temporally stratified age and sex composition of sockeye salmon in the upper Copper River escapement past the Miles Lake sonar project estimated from fish sampled in the personal–use and subsistence fisheries near Chitina, 1992.

		Brood Year and Age Group								
		1989	1988		1987			1986		
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3	Total
Stratum dates:	05/27 – 07/04 [a]									
Sampling dates:	06/05 – 07/12 [b]									
Sample size:	1,523									
Female	Percent of sample	1.0	4.6	10.6	0.1	42.2	2.5	0.3	3.2	64.6
	Number in escapement	4,266	19,908	46,072	569	182,868	10,807	1,422	13,935	279,848
Male	Percent of sample	0.3	3.3	3.0	0.0	26.1	0.3	0.2	2.2	35.4
	Number in escapement	1,138	14,504	13,082	0	112,906	1,138	853	9,670	153,290
Total	Percent of sample	1.2	7.9	13.7	0.1	68.3	2.8	0.5	5.4	100.0
	Number in escapement	5,404	34,412	59,155	569	295,774	11,945	2,275	23,605	433,138
	Standard error	1,232	3,003	3,813	402	5,167	1,818	803	2,520	
Stratum dates:	07/05 – 09/29 [a]									
Sampling dates:	07/17 – 08/16 [b]									
Sample size:	1,335									
Female	Percent of sample	0.1	0.7	6.1	0.1	61.6	0.3	0.2	0.7	70.0
	Number in escapement	126	1,265	10,369	253	103,944	506	379	1,265	118,107
Male	Percent of sample	0.0	0.1	2.5	0.0	27.0	0.0	0.2	0.2	30.0
	Number in escapement	0	126	4,173	0	45,649	0	379	379	50,707
Total	Percent of sample	0.1	0.8	8.6	0.1	88.6	0.3	0.4	1.0	100.0
	Number in escapement	126	1,391	14,542	253	149,593	506	759	1,644	168,814
	Standard error	126	418	1,297	179	1,468	253	309	454	
Strata Combined:	05/27 – 09/29 [a]									
Sampling dates:	06/05 – 08/16 [b]									
Sample size:	2,858									
Female	Percent of sample	0.7	3.5	9.4	0.1	47.6	1.9	0.3	2.5	66.1
	Number in escapement	4,392	21,172	56,442	822	286,812	11,313	1,801	15,200	397,954
Male	Percent of sample	0.2	2.4	2.9	0.0	26.3	0.2	0.2	1.7	33.9
	Number in escapement	1,138	14,631	17,255	0	158,555	1,138	1,233	10,049	203,998
Total	Percent of sample	0.9	5.9	12.2	0.1	74.0	2.1	0.5	4.2	100.0
	Number in escapement	5,530	35,803	73,697	822	445,367	12,451	3,034	25,249	601,952
	Standard error	1,239	3,031	4,027	440	5,371	1,836	860	2,561	

[a] Dates of passage at Miles Lake estimated from mean travel rates obtained in mark/recapture studies conducted in 1970 and 1972.

[b] Dates fish were sampled in the subsistence and personal use fisheries near Chitina.

Appendix E
Age and Sex Data for Commercial Common Property Salmon Catches from Prince William Sound (Districts 221–229)

Appendix E.1. Estimated age and sex composition of sockeye salmon harvested in the Unakwik District commercial common property drift gillnet and purse seine fisheries, 1992.

		Brood Year and Age Group							
		1989	1988		1987		1986		
		0.2	0.3	1.2	1.3	2.2	1.4	2.3	Total
Stratum dates:	06/27 – 08/19								
Sampling dates:	07/28								
Sample size:	41								
Female	Percent of sample	2.4	0.0	22.0	9.8	2.4	2.4	9.8	48.8
	Number in catch	55	0	497	221	55	55	221	1,105
Male	Percent of sample	2.4	2.4	24.4	22.0	0.0	0.0	0.0	51.2
	Number in catch	55	55	553	497	0	0	0	1,161
Total	Percent of sample	4.9	2.4	46.3	31.7	2.4	2.4	9.8	100.0
	Number in catch	111	55	1,050	718	55	55	221	2,266
	Standard error	77	55	179	167	55	55	106	

Appendix E.2. Temporally stratified age and sex composition of sockeye salmon harvested in the Eshamy District commercial common property gillnet fishery, 1992.

		Brood Year and Age Group									
		1990	1989		1988		1987		1986		
		0.1	0.2	1.1	0.3	1.2	1.3	2.2	1.4	2.3	Total
Stratum dates:	06/15 – 06/23										
Sampling dates:	06/17 – 06/22										
Sample size:	862										
Female	Percent of sample	0.0	0.1	0.0	0.3	13.5	31.7	0.0	0.1	0.5	46.2
	Number in catch	0	33	0	98	3,772	8,877	0	33	130	12,941
Male	Percent of sample	0.0	0.1	0.0	0.3	16.5	32.1	0.2	0.1	0.2	49.7
	Number in catch	0	33	0	98	4,617	9,007	65	33	65	13,917
Total	Percent of sample	0.0	0.2	0.0	0.7	31.8	66.1	0.2	0.2	0.7	100.0
	Number in catch	0	65	0	195	8,909	18,534	65	65	195	28,029
	Standard error	0	46	0	79	445	452	46	46	79	
Stratum dates:	06/25 – 07/02										
Sampling dates:	06/29										
Sample size:	867										
Female	Percent of sample	0.0	0.0	0.0	0.0	29.2	22.0	0.5	0.0	0.2	51.9
	Number in catch	0	0	0	0	28,797	21,740	455	0	228	51,221
Male	Percent of sample	0.0	0.0	0.0	0.0	22.3	17.8	0.1	0.0	0.1	40.3
	Number in catch	0	0	0	0	21,968	17,529	114	0	114	39,724
Total	Percent of sample	0.0	0.0	0.0	0.0	56.2	42.9	0.6	0.0	0.3	100.0
	Number in catch	0	0	0	0	55,432	42,342	569	0	341	98,685
	Standard error	0	0	0	0	1,664	1,660	254	0	197	
Stratum dates:	07/03 – 07/09										
Sampling dates:	07/06 – 07/07										
Sample size:	972										
Female	Percent of sample	0.0	0.1	0.0	0.0	40.3	19.2	0.6	0.0	0.2	60.5
	Number in catch	0	168	0	0	65,908	31,441	1,009	0	336	98,863
Male	Percent of sample	0.0	0.0	0.2	0.1	22.9	15.7	0.2	0.0	0.3	39.5
	Number in catch	0	0	336	168	37,494	25,724	336	0	504	64,563
Total	Percent of sample	0.0	0.1	0.2	0.1	63.3	35.0	0.8	0.0	0.5	100.0
	Number in catch	0	168	336	168	103,402	57,165	1,345	0	841	163,426
	Standard error	0	168	238	168	2,528	2,501	474	0	375	
Stratum dates:	07/10 – 07/14										
Sampling dates:	07/13										
Sample size:	847										
Female	Percent of sample	0.0	0.1	0.0	0.0	42.5	19.7	0.4	0.0	0.1	62.8
	Number in catch	0	144	0	0	51,722	23,993	431	0	144	76,434
Male	Percent of sample	0.0	0.1	0.2	0.0	21.5	15.2	0.1	0.0	0.0	37.2
	Number in catch	0	144	287	0	26,148	18,534	144	0	0	45,257
Total	Percent of sample	0.0	0.2	0.2	0.0	64.0	34.9	0.5	0.0	0.1	100.0
	Number in catch	0	287	287	0	77,871	42,527	575	0	144	121,691
	Standard error	0	203	203	0	2,008	1,995	287	0	144	

–Continued–

Appendix E.2. (Page 2 of 2)

		Brood Year and Age Group									
		1990	1989		1988		1987		1986		
		0.1	0.2	1.1	0.3	1.2	1.3	2.2	1.4	2.3	Total
Stratum dates:	07/16 – 08/06										
Sampling dates:	07/21										
Sample size:	414										
Female	Percent of sample	0.0	0.0	0.7	0.0	34.1	15.2	0.2	0.0	0.5	50.7
	Number in catch	0	0	540	0	25,360	11,331	180	0	360	37,771
Male	Percent of sample	0.0	0.2	0.7	0.0	31.4	16.9	0.0	0.0	0.0	49.3
	Number in catch	0	180	540	0	23,382	12,590	0	0	0	36,691
Total	Percent of sample	0.0	0.2	1.4	0.0	65.5	32.1	0.2	0.0	0.5	100.0
	Number in catch	0	180	1,079	0	48,742	23,921	180	0	360	74,462
	Standard error	0	180	438	0	1,742	1,711	180	0	254	
Stratum dates:	08/07 – 09/14										
Sampling dates:	08/17 – 08/21										
Sample size:	323										
Female	Percent of sample	0.0	0.0	0.0	0.0	36.5	2.2	8.7	0.0	0.0	47.4
	Number in catch	0	0	0	0	11,643	691	2,763	0	0	15,097
Male	Percent of sample	0.3	0.0	0.6	0.0	39.3	2.2	10.2	0.0	0.0	52.6
	Number in catch	99	0	197	0	12,531	691	3,256	0	0	16,774
Total	Percent of sample	0.3	0.0	0.6	0.0	75.9	4.3	18.9	0.0	0.0	100.0
	Number in catch	99	0	197	0	24,175	1,381	6,019	0	0	31,871
	Standard error	99	0	139	0	760	362	695	0	0	
Strata combined	06/15 – 09/14										
Sampling dates:	06/17 – 08/21										
Sample size:	4,285										
Female	Percent of sample	0.0	0.1	0.1	0.0	36.1	18.9	0.9	0.0	0.2	56.4
	Number in catch	0	344	540	98	187,203	98,073	4,838	33	1,197	292,326
Male	Percent of sample	0.0	0.1	0.3	0.1	24.3	16.2	0.8	0.0	0.1	41.9
	Number in catch	99	356	1,361	266	126,141	84,075	3,915	33	683	216,927
Total	Percent of sample	0.0	0.1	0.4	0.1	61.5	35.9	1.7	0.0	0.4	100.0
	Number in catch	99	700	1,900	363	318,531	185,872	8,753	65	1,881	518,164
	Standard error	99	322	556	186	4,124	4,031	943	46	521	

Appendix E.3. Temporally stratified age and sex composition of sockeye salmon harvested in the Southwestern District commercial common property purse seine fishery, 1992.

		Brood Year and Age Group										
		1990	1989		1988			1987		1986	1985	
		0.1	0.2	1.1	0.3	1.2	2.1	1.3	2.2	2.3	1.5	Total
Stratum dates:	07/27 – 08/03											
Sampling dates:	07/28											
Sample size:	554											
Female	Percent of sample	0.0	5.8	0.0	0.7	32.5	0.0	12.6	1.4	0.4	0.0	53.4
	Number in catch	0	848	0	106	4,770	0	1,855	212	53	0	7,844
Male	Percent of sample	0.2	4.9	0.2	1.1	26.0	0.2	12.1	1.6	0.2	0.2	46.6
	Number in catch	27	716	27	159	3,816	27	1,776	239	27	27	6,837
Total	Percent of sample	0.2	10.6	0.2	1.8	58.5	0.2	24.7	3.1	0.5	0.2	100.0
	Number in catch	27	1,564	27	265	8,586	27	3,631	451	80	27	14,681
	Standard error	27	193	27	83	308	27	269	108	46	27	
Stratum dates:	08/05 – 08/29											
Sampling dates:	08/09											
Sample size:	602											
Female	Percent of sample	0.0	0.0	0.5	0.0	35.7	0.0	3.2	7.8	0.0	0.0	47.2
	Number in catch	0	0	77	0	5,492	0	485	1,201	0	0	7,255
Male	Percent of sample	0.0	0.0	1.8	0.0	41.4	0.2	5.0	4.5	0.0	0.0	52.8
	Number in catch	0	0	281	0	6,361	26	766	690	0	0	8,123
Total	Percent of sample	0.0	0.0	2.3	0.0	77.1	0.2	8.1	12.3	0.0	0.0	100.0
	Number in catch	0	0	358	0	11,853	26	1,252	1,890	0	0	15,378
	Standard error	0	0	95	0	264	26	172	206	0	0	
Strata combined	07/27 – 08/29											
Sampling dates:	07/28 – 08/09											
Sample size:	1,156											
Female	Percent of sample	0.0	2.8	0.3	0.4	34.1	0.0	7.8	4.7	0.2	0.0	50.2
	Number in catch	0	848	77	106	10,262	0	2,340	1,413	53	0	15,099
Male	Percent of sample	0.1	2.4	1.0	0.5	33.9	0.2	8.5	3.1	0.1	0.1	49.8
	Number in catch	27	716	307	159	10,177	52	2,542	928	27	27	14,960
Total	Percent of sample	0.1	5.2	1.3	0.9	68.0	0.2	16.2	7.8	0.3	0.1	100.0
	Number in catch	27	1,564	384	265	20,439	52	4,882	2,341	80	27	30,059
	Standard error	27	193	98	83	405	37	319	232	46	27	

Appendix E.4. Estimated age and sex composition of sockeye salmon harvested in the Northern District commercial common property purse seine fishery, 1992.

		Brood Year and Age Group						
		1989	1988		1987		1986	
		0.2	0.3	1.2	1.3	2.2	2.3	Total
Stratum dates:	08/01 – 08/22							
Sampling dates:	07/27 – 08/08							
Sample size:	158							
Female	Percent of sample	3.2	0.6	18.4	18.4	7.0	7.6	55.1
	Number in catch	49	10	283	283	107	117	850
Male	Percent of sample	2.5	1.3	13.9	15.8	3.8	7.6	44.9
	Number in catch	39	20	215	244	59	117	694
Total	Percent of sample	5.7	1.9	32.3	34.2	10.8	15.2	100.0
	Number in catch	88	29	498	528	166	235	1,544
	Standard error	29	17	58	58	38	44	

Appendix E.5. Temporally stratified age and sex composition of sockeye salmon harvested in the Coghill District commercial common property drift gillnet fishery, 1992.

		Brood Year and Age Group							
		1988		1987		1986		1985	
		0.3	1.2	1.3	2.2	1.4	2.3	2.4	Total
Stratum dates:	06/11 – 07/04								
Sampling dates:	06/12 – 07/06								
Sample size:	239								
Female	Percent of sample	0.8	14.2	31.4	2.9	0.0	2.1	0.0	51.5
	Number in catch	217	3,683	8,124	758	0	542	0	13,323
Male	Percent of sample	0.0	15.5	27.6	2.9	0.4	1.7	0.4	48.5
	Number in catch	0	4,008	7,149	758	108	433	108	12,565
Total	Percent of sample	0.8	29.7	59.0	5.9	0.4	3.8	0.4	100.0
	Number in catch	217	7,691	15,273	1,516	108	975	108	25,888
	Standard error	153	767	825	394	108	319	108	
Stratum dates:	07/05 – 09/25								
Sampling dates:	07/13								
Sample size:	389								
Female	Percent of sample	0.0	15.9	31.1	1.8	0.0	1.5	0.0	50.4
	Number in catch	0	5,105	9,963	576	0	494	0	16,139
Male	Percent of sample	0.0	21.3	24.9	0.8	0.0	2.6	0.0	49.6
	Number in catch	0	6,834	7,987	247	0	823	0	15,892
Total	Percent of sample	0.0	37.3	56.0	2.6	0.0	4.1	0.0	100.0
	Number in catch	0	11,940	17,951	823	0	1,317	0	32,031
	Standard error	0	786	807	257	0	323	0	
Strata combined:	06/11 – 09/25								
Sampling dates:	06/12 – 07/13								
Sample size:	628								
Female	Percent of sample	0.4	15.2	31.2	2.3	0.0	1.8	0.0	50.9
	Number in catch	217	8,788	18,087	1,335	0	1,036	0	29,462
Male	Percent of sample	0.0	18.7	26.1	1.7	0.2	2.2	0.2	49.1
	Number in catch	0	10,842	15,136	1,005	108	1,257	108	28,457
Total	Percent of sample	0.4	33.9	57.4	4.0	0.2	4.0	0.2	100.0
	Number in catch	217	19,630	33,223	2,340	108	2,292	108	57,919
	Standard error	153	1,098	1,154	471	108	454	108	

Appendix E.6. Estimated age and sex composition of coho salmon harvested in the Coghill District commercial common property drift gillnet and purse seine fisheries, 1992.

		Brood Year and Age Group			
		1989	1988		
		1.1	1.2	2.1	Total
Stratum dates:	07/03 - 09/25				
Sampling date:	08/31				
Sample size:	198				
Female	Percent of sample	70.7	0.5	1.0	72.2
	Number in catch	80,801	577	1,154	82,533
Male	Percent of sample	26.3	0.0	1.0	27.3
	Number in catch	30,012	0	1,154	31,166
Total	Percent of sample	97.5	0.5	2.0	100.0
	Number in catch	111,390	577	2,309	114,276
	Standard error	1,277	577	1,145	

Appendix E.7. Estimated age and sex composition of chum salmon harvested in the Eastern District commercial common property purse seine fishery, 1992.

		Brood Year and Age Group			
		1988	1987	1986	
		0.3	0.4	0.5	Total
Stratum dates:	07/11 – 07/25				
Sampling dates:	07/21				
Sample size:	179				
Female	Percent of sample	46.9	7.3	0.6	54.7
	Number in catch	2,561	396	30	2,988
Male	Percent of sample	34.1	10.1	1.1	45.3
	Number in catch	1,860	549	61	2,470
Total	Percent of sample	81.0	17.3	1.7	100.0
	Number in catch	4,421	945	91	5,458
	Standard error	160	155	53	

Appendix E.8. Temporally stratified age and sex composition of chum salmon harvested in the Northern and Unakwik Districts commercial common property purse seine fisheries, 1992.

		Brood Year and Age Group				
		1989	1988	1987	1986	
		0.2	0.3	0.4	0.5	Total
Stratum dates:	07/28 – 07/31					
Sampling dates:	07/28 – 07/31					
Sample size:	669					
Female	Percent of sample	0.9	41.3	7.9	0.9	51.0
	Number in catch	42	1,912	367	42	2,363
Male	Percent of sample	0.3	35.4	7.5	0.3	43.5
	Number in catch	14	1,642	346	14	2,016
Total	Percent of sample	1.6	80.0	17.0	1.3	100.0
	Number in catch	76	3,707	790	62	4,635
	Standard error	23	72	67	21	
Stratum dates:	08/03 – 08/22					
Sampling dates:	08/09 – 08/09					
Sample size:	401					
Female	Percent of sample	0.7	53.1	3.7	0.2	57.9
	Number in catch	74	5,276	372	25	5,747
Male	Percent of sample	1.0	37.9	3.2	0.0	42.1
	Number in catch	99	3,765	322	0	4,186
Total	Percent of sample	1.7	91.0	7.0	0.2	100.0
	Number in catch	173	9,041	694	25	9,933
	Standard error	65	142	127	25	
Strata combined:	07/28 – 08/22					
Sampling dates:	07/28 – 08/09					
Sample size:	1,070					
Female	Percent of sample	0.8	49.3	5.1	0.5	55.7
	Number in catch	116	7,188	739	66	8,109
Male	Percent of sample	0.8	37.1	4.6	0.1	42.6
	Number in catch	113	5,407	668	14	6,202
Total	Percent of sample	1.7	87.5	10.2	0.6	100.0
	Number in catch	250	12,748	1,483	87	14,568
	Standard error	69	159	143	32	

Appendix E.9. Temporally stratified age and sex composition of chum salmon harvested in the Coghill District commercial common property drift gillnet fishery, 1992.

		Brood Year and Age Group				
		1989	1988	1987	1986	
		0.2	0.3	0.4	0.5	Total
Stratum dates:	06/11 – 06/12					
Sampling dates:	06/13 – 06/13					
Sample size:	137					
Female	Percent of sample	0.0	30.7	21.9	2.9	55.5
	Number in catch	0	1,253	895	119	2,267
Male	Percent of sample	0.0	24.1	17.5	2.9	44.5
	Number in catch	0	984	716	119	1,820
Total	Percent of sample	0.0	54.7	39.4	5.8	100.0
	Number in catch	0	2,237	1,611	239	4,087
	Standard error	0	174	171	82	
Stratum dates:	06/29 – 06/30					
Sampling dates:	06/29 – 06/29					
Sample size:	438					
Female	Percent of sample	0.0	39.7	11.2	0.5	51.4
	Number in catch	0	29,289	8,248	337	37,873
Male	Percent of sample	0.0	33.1	14.6	0.9	48.6
	Number in catch	0	24,407	10,773	673	35,854
Total	Percent of sample	0.0	72.8	25.8	1.4	100.0
	Number in catch	0	53,696	19,021	1,010	73,727
	Standard error	0	1,569	1,543	410	
Stratum dates:	07/03 – 07/10					
Sampling dates:	07/06 – 07/06					
Sample size:	481					
Female	Percent of sample	0.4	60.5	12.5	0.2	73.6
	Number in catch	245	35,588	7,338	122	43,293
Male	Percent of sample	0.4	19.8	5.8	0.2	26.2
	Number in catch	245	11,618	3,424	122	15,409
Total	Percent of sample	0.8	80.5	18.3	0.4	100.0
	Number in catch	489	47,328	10,762	245	58,824
	Standard error	244	1,065	1,038	173	

–Continued–

		Brood Year and Age Group				
		1989	1988	1987	1986	
		0.2	0.3	0.4	0.5	Total
Stratum dates:	07/13 – 09/18					
Sampling dates:	07/13 – 07/13					
Sample size:	520					
Female	Percent of sample	0.8	65.4	10.2	0.0	76.3
	Number in catch	352	29,943	4,668	0	34,963
Male	Percent of sample	1.3	18.1	4.2	0.0	23.7
	Number in catch	616	8,278	1,937	0	10,832
Total	Percent of sample	2.1	83.5	14.4	0.0	100.0
	Number in catch	969	38,221	6,605	0	45,795
	Standard error	289	747	706	0	
Strata combined:	06/11 – 09/18					
Sampling dates:	06/13 – 07/13					
Sample size:	1,576					
Female	Percent of sample	0.3	52.7	11.6	0.3	64.9
	Number in catch	597	96,073	21,148	578	118,396
Male	Percent of sample	0.5	24.8	9.2	0.5	35.0
	Number in catch	861	45,288	16,851	915	63,915
Total	Percent of sample	0.8	77.6	20.8	0.8	100.0
	Number in catch	1,458	141,483	37,999	1,493	182,433
	Standard error	378	2,045	1,997	452	

Appendix E.10. Temporally stratified age and sex composition of chum salmon harvested in the Eshamy District commercial common property gillnet fishery, 1992.

		Brood Year and Age Group					
		1989	1988	1987	1986	1985	
		0.2	0.3	0.4	0.5	0.6	Total
Stratum dates:	06/15 – 06/16						
Sampling dates:	06/17						
Sample size:	195						
Female	Percent of sample	0.0	24.1	16.4	13.8	0.0	54.4
	Number in catch	0	707	481	406	0	1,594
Male	Percent of sample	0.5	11.3	16.4	17.4	0.0	45.6
	Number in catch	15	331	481	511	0	1,339
Total	Percent of sample	0.5	35.4	32.8	31.3	0.0	100.0
	Number in catch	15	1,038	963	918	0	2,933
	Standard error	15	101	99	98	0	
Stratum dates:	06/18 – 06/20						
Sampling dates:	06/20 – 06/21						
Sample size:	371						
Female	Percent of sample	0.3	28.8	21.3	11.1	0.0	61.5
	Number in catch	8	830	613	318	0	1,769
Male	Percent of sample	0.3	13.2	12.7	11.9	0.3	38.3
	Number in catch	8	380	365	341	8	1,102
Total	Percent of sample	0.5	42.0	34.2	22.9	0.3	100.0
	Number in catch	16	1,210	985	659	8	2,878
	Standard error	11	74	71	63	8	
Stratum dates:	06/22 – 06/27						
Sampling dates:	06/24						
Sample size:	574						
Female	Percent of sample	0.0	34.8	21.8	8.0	0.0	64.6
	Number in catch	0	4,464	2,790	1,027	0	8,281
Male	Percent of sample	0.2	18.5	11.1	5.4	0.2	35.4
	Number in catch	22	2,366	1,429	692	22	4,531
Total	Percent of sample	0.2	53.3	32.9	13.4	0.2	100.0
	Number in catch	22	6,830	4,219	1,719	22	12,812
	Standard error	22	267	252	182	22	
Stratum dates:	06/29 – 09/30						
Sampling dates:	06/29						
Sample size:	470						
Female	Percent of sample	1.3	44.0	19.1	6.4	0.0	70.9
	Number in catch	473	16,316	7,094	2,365	0	26,247
Male	Percent of sample	0.0	16.8	8.7	3.4	0.2	29.1
	Number in catch	0	6,227	3,232	1,261	79	10,799
Total	Percent of sample	1.3	60.9	27.9	9.8	0.2	100.0
	Number in catch	473	22,543	10,326	3,626	79	37,046
	Standard error	192	835	767	508	79	
Strata combined:	06/15 – 09/30						
Sampling dates:	06/17 – 06/29						
Sample size:	1,610						
Female	Percent of sample	0.9	40.1	19.7	7.4	0.0	68.1
	Number in catch	481	22,317	10,978	4,116	0	37,891
Male	Percent of sample	0.1	16.7	9.9	5.0	0.2	31.9
	Number in catch	45	9,304	5,506	2,806	109	17,770
Total	Percent of sample	0.9	56.8	29.6	12.4	0.2	100.0
	Number in catch	526	31,621	16,492	6,921	109	55,669
	Standard error	194	885	816	552	82	

Appendix E.11. Temporally stratified age and sex composition of chum salmon harvested in the Southwestern District commercial common property purse seine fishery, 1992.

		Brood Year and Age Group				
		1989	1988	1987	1986	
		0.2	0.3	0.4	0.5	Total
Stratum dates:	07/27 – 08/03					
Sampling dates:	07/28					
Sample size:	366					
Female	Percent of sample	3.6	52.5	9.8	1.1	66.9
	Number in catch	179	2,643	496	55	3,372
Male	Percent of sample	1.9	20.8	9.3	1.1	33.1
	Number in catch	96	1,046	468	55	1,666
Total	Percent of sample	5.5	73.2	19.1	2.2	100.0
	Number in catch	275	3,689	964	110	5,038
	Standard error	60	117	104	39	
Stratum dates:	08/05 – 08/29					
Sampling dates:	08/08					
Sample size:	197					
Female	Percent of sample	6.6	38.1	11.7	0.5	56.9
	Number in catch	226	1,302	399	17	1,945
Male	Percent of sample	7.6	24.4	8.6	0.0	40.6
	Number in catch	260	834	295	0	1,389
Total	Percent of sample	14.7	64.5	20.3	0.5	100.0
	Number in catch	504	2,205	695	17	3,421
	Standard error	87	117	98	17	
Strata combined:	07/27 – 08/29					
Sampling dates:	07/28 – 08/08					
Sample size:	563					
Female	Percent of sample	4.8	46.6	10.6	0.9	62.9
	Number in catch	405	3,945	895	72	5,317
Male	Percent of sample	4.2	22.2	9.0	0.7	36.1
	Number in catch	357	1,880	763	55	3,055
Total	Percent of sample	9.2	69.7	19.6	1.5	100.0
	Number in catch	779	5,894	1,658	127	8,459
	Standard error	105	165	143	42	

Appendix F
Salmon Escapements to Coastal Streams
in Prince William Sound

Appendix F.1. Daily escapement counts of chinook, sockeye, pink, and chum salmon through the Coghill River weir, 1992.

Date	Daily escapement [a]							
	Chinook		Sockeye [b]		Pink [c]		Chum	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
06/14	Weir installed							
06/15	0	0	0	0	0	0	0	0
06/16	0	0	0	0	0	0	0	0
06/17	0	0	2	2	0	0	0	0
06/18	0	0	9	11	0	0	0	0
06/19	0	0	3	14	0	0	0	0
06/20	0	0	5	19	0	0	0	0
06/21	0	0	4	23	0	0	0	0
06/22	0	0	6	29	0	0	0	0
06/23	0	0	8	37	0	0	0	0
06/24	0	0	10	47	0	0	0	0
06/25	0	0	11	58	0	0	0	0
06/26	0	0	16	74	0	0	0	0
06/27	0	0	59	133	0	0	0	0
06/28	0	0	397	530	0	0	1	1
06/29	0	0	684	1,214	0	0	1	2
06/30	0	0	744	1,958	0	0	0	2
07/01	0	0	2,223	4,181	0	0	0	2
07/02	0	0	1,273	5,454	0	0	1	3
07/03	0	0	1,408	6,862	0	0	0	3
07/04	0	0	371	7,233	0	0	0	3
07/05	0	0	20	7,253	0	0	0	3
07/06	0	0	199	7,452	1	1	1	4
07/07	0	0	144	7,596	0	1	0	4
07/08	0	0	452	8,048	0	1	0	4
07/09	1	1	1,521	9,569	2	3	0	4
07/10	1	2	1,156	10,725	1	4	0	4
07/11	1	3	891	11,616	3	7	0	4
07/12	0	3	1,893	13,509	3	10	4	8
07/13	0	3	1,526	15,035	9	19	0	8
07/14	1	4	1,647	16,682	9	28	0	8
07/15	0	4	629	17,311	3	31	0	8
07/16	0	4	450	17,761	2	33	2	10
07/17	1	5	712	18,473	5	38	0	10
07/18	0	5	1,129	19,602	5	43	1	11
07/19	0	5	1,018	20,620	7	50	2	13
07/20	0	5	758	21,378	18	68	3	16
07/21	1	6	889	22,267	11	79	1	17
07/22	0	6	622	22,889	35	114	1	18
07/23	1	7	842	23,731	20	134	4	22
07/24	0	7	566	24,297	12	146	2	24
07/25	0	7	560	24,857	47	193	3	27
07/26	3	10	598	25,455	49	242	6	33
07/27	2	12	469	25,924	46	288	4	37
07/28	3	15	1,223	27,147	186	474	11	48
07/29	0	15	996	28,143	175	649	7	55
07/30	0	15	360	28,503	19	668	1	56
07/31	2	17	508	29,011	47	715	0	56
08/01	0	17	191	29,202	24	739	0	56
08/02	0	17	440	29,642	43	782	0	56
Total		17		29,642		782		56

[a] A total of 31 coho salmon passed the weir in 1992.

[b] Count includes 332 jacks.

[c] Count may be incomplete. The Coghill weir is designed to prohibit the passage of sockeye salmon and because of their smaller size some pink salmon are able to pass uncounted.

Appendix F.2. Daily escapement counts of sockeye, coho, pink, and chum salmon through the weir at the head of Eshamy Lagoon, 1992.

Date	Sockeye		Coho		Pink[a]		Chum	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
06/14	1	1	0	0	0	0	0	0
06/15	0	1	0	0	0	0	0	0
06/16	0	1	0	0	0	0	0	0
06/17	0	1	0	0	0	0	0	0
06/18	0	1	0	0	0	0	0	0
06/19	0	1	0	0	0	0	0	0
06/20	0	1	0	0	0	0	0	0
06/21	1	2	0	0	0	0	0	0
06/22	0	2	0	0	0	0	0	0
06/23	0	2	0	0	0	0	0	0
06/24	0	2	0	0	0	0	0	0
06/25	0	2	0	0	0	0	0	0
06/26	0	2	0	0	0	0	0	0
06/27	17	19	0	0	0	0	0	0
06/28	35	54	0	0	0	0	0	0
06/29	70	124	0	0	0	0	0	0
06/30	10	134	0	0	0	0	0	0
07/01	38	172	0	0	0	0	0	0
07/02	62	234	0	0	0	0	0	0
07/03	84	318	0	0	0	0	0	0
07/04	27	345	0	0	0	0	0	0
07/05	4	349	0	0	0	0	0	0
07/06	96	445	0	0	0	0	0	0
07/07	127	572	0	0	0	0	0	0
07/08	59	631	0	0	0	0	0	0
07/09	33	664	0	0	1	1	0	0
07/10	170	834	0	0	0	1	0	0
07/11	104	938	0	0	0	1	0	0
07/12	103	1,041	0	0	0	1	0	0
07/13	114	1,155	0	0	2	3	0	0
07/14	267	1,422	0	0	0	3	0	0
07/15	260	1,682	0	0	2	5	0	0
07/16	212	1,894	0	0	3	8	0	0
07/17	475	2,369	0	0	2	10	0	0
07/18	109	2,478	0	0	1	11	0	0
07/19	244	2,722	0	0	0	11	0	0
07/20	353	3,075	0	0	6	17	0	0
07/21	710	3,785	0	0	3	20	0	0
07/22	681	4,466	0	0	1	21	0	0
07/23	329	4,795	0	0	1	22	0	0
07/24	1,580	6,375	0	0	4	26	0	0
07/25	826	7,201	0	0	3	29	0	0
07/26	2,771	9,972	0	0	6	35	0	0
07/27	891	10,863	0	0	7	42	0	0
07/28	523	11,386	0	0	3	45	0	0
07/29	427	11,813	0	0	9	54	0	0
07/30	2,455	14,268	0	0	33	87	0	0
07/31	3,222	17,490	0	0	22	109	0	0

–Continued–

Date	Sockeye		Coho		Pink[a]		Chum	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
08/01	1,619	19,109	0	0	18	127	0	0
08/02	1,591	20,700	1	1	18	145	2	2
08/03	991	21,691	0	1	7	152	0	2
08/04	2,982	24,673	0	1	141	293	0	2
08/05	823	25,496	1	2	73	366	0	2
08/06	978	26,474	0	2	54	420	0	2
08/07	748	27,222	0	2	21	441	1	3
08/08	778	28,000	0	2	53	494	0	3
08/09	775	28,775	0	2	80	574	0	3
08/10	1,009	29,784	1	3	85	659	1	4
08/11	225	30,009	1	4	33	692	0	4
08/12	2	30,011	0	4	0	692	0	4
08/13	317	30,328	0	4	26	718	0	4
08/14	449	30,777	0	4	75	793	0	4
08/15	669	31,446	0	4	88	881	0	4
08/16	1,078	32,524	1	5	126	1,007	0	4
08/17	652	33,176	1	6	98	1,105	0	4
08/18	580	33,756	2	8	40	1,145	0	4
08/19	535	34,291	1	9	42	1,187	0	4
08/20	255	34,546	0	9	32	1,219	0	4
08/21	385	34,931	0	9	114	1,333	0	4
08/22	183	35,114	0	9	82	1,415	0	4
08/23	73	35,187	0	9	83	1,498	0	4
08/24	580	35,767	9	18	917	2,415	1	5
08/25	0	35,767	0	18	0	2,415	0	5
08/26	73	35,840	2	20	76	2,491	0	5
08/27	153	35,993	8	28	98	2,589	0	5
08/28	114	36,107	16	44	184	2,773	0	5
08/29	96	36,203	7	51	149	2,922	0	5
08/30	28	36,231	1	52	55	2,977	0	5
08/31	6	36,237	0	52	27	3,004	0	5
		36,237		52		3,004		5

[a] Count may be incomplete. The Eshamy weir is designed to prohibit the passage of sockeye salmon and because of their smaller size some pink salmon are able to pass uncounted.

Appendix F.3. Aerial survey escapement counts of sockeye salmon from selected systems, Prince William Sound, 1992

Stream name	Stream number	Week ending date [a]									
		18 July	25 July	01 Aug.	08 Aug.	15 Aug.	22 Aug.	29 Aug.	05 Sept.	12 Sept.	19 Sept.
Robe River	138	NS	NS	NS	80	NS	NS	NS	NS	NS	NS
Billy's Hole	218	600	40	125	0	8	10	0	0	NS	NS
Cowpen Lake	242	0	30	NS	5	60	0	0	0	250	NS
Miners Lake	244	10	2,160	NS	450	1,800	1,000	NC	400	80	NS
Red Lake	300	0	510	20	170	180	25	0	10	0	NS
Golden Lagoon[b]	310	3,000	4,500	970	3,700	1,100	0	0	0	0	NS
Halferty Creek	454	0	0	0	0	200	0	0	0	NS	0
Cochrane Creek	461	0	0	0	0	60	0	0	50	NS	NS
Shrode Lake	476	500	1,180	500	380	900	400	2,000	1,500	NS	1,300
Culross Creek	479	0	0	0	0	0	0	0	0	50	0
Jackpot Lakes	608	700	950	2,140	1,950	700	1,600	725	850	NS	270
Bainbridge	630	250	350	960	500	200	350	100	75	NS	25
Point Creek	702	NS	0	0	0	50	0	NS	NS	0	NS
Cabin Creek	747	NS	0	0	0	50	0	NS	NS	0	NS
Total		5,060	9,720	4,715	7,235	5,308	3,385	2,825	2,885	380	1,595

[a] Counts contained in this table are obtained in conjunction with the regular pink and chum aerial survey program. Many of these sockeye systems are difficult to survey and the counts do not necessarily represent total live abundance at a particular time.

[b] Believed to be returns from hatchery sockeye released into Davis Lake.

Appendix F.4. Weekly aerial survey estimates of the escapement of live pink salmon to selected streams in Prince William Sound, 1992.

District	Stream Number	Stream Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Eastern	2	Hartney Creek	NS	NS	NS	NS	NS	450	NS	NS	1,000	NS	NS	75	NS	1	1,756
	5	Eccles Creek	NS	NS	NS	NS	NS	0	0	NS	68	200	NS	NC	NS	0	223
	11	Humpback Creek	NS	NS	0	0	0	0	175	80	75	50	80	20	5	NS	280
	221-10	Orca Inlet	NS	NS	0	0	0	450	175	80	1,143	250	80	95	5	1	2,258
	19	Twin Lakes Creek	NS	NS	0	0	0	0	0	0	25	50	110	10	0	NS	110
	20	Spring Creek	NS	NS	0	0	0	0	20	3	0	0	0	0	1	NS	1
	21	Rogue Creek	NS	NS	0	0	0	0	20	50	25	100	70	15	0	NS	100
	23	Chase Creek	0	0	0	0	0	5	0	0	1	1	0	0	0	NS	5
	35	Koppen Creek	0	0	0	0	0	0	415	585	1,000	1,500	800	1,500	300	NS	2,325
	36	Sheep Creek	0	0	0	0	0	250	3,740	4,650	NS	7,000	340	5,000	2,000	NS	12,173
	37	Allen Creek	NS	NS	NS	0	0	0	0	98	0	550	80	50	0	NS	550
	221-20	Simpson/Sheep	0	0	0	0	0	255	4,195	5,386	1,051	9,201	1,400	6,575	2,301	NS	15,264
	41	Plateau Creek	NS	NS	0	0	0	0	0	0	0	10	160	0	0	NS	160
	45	Pass Creek	NS	NS	0	0	0	0	0	0	0	0	10	10	0	NS	10
	46	Comfort Creek	NS	NS	0	0	0	0	118	0	50	900	400	150	0	NS	900
	48	Beartrap River	0	0	0	50	50	1,550	3,250	4,750	4,200	7,500	2,600	3,500	1,300	NS	9,915
	49	Cataract Creek	NS	NS	0	0	0	0	0	0	0	0	20	0	0	NS	20
	51	Olsen Creek	0	0	0	0	300	1,750	4,375	5,400	4,000	5,000	2,800	1,700	1,900	NS	12,481
	52	Control Creek	NS	NS	0	0	0	1,300	1,950	2,700	2,230	3,300	900	1,600	400	NS	6,306
	54	Carlsen Creek	NS	NS	0	0	0	0	0	0	10	3	100	30	0	NS	100
	56	St. Matthews Creek	NS	NS	0	0	0	40	460	850	200	2,000	1,350	1,600	1,200	NS	3,620
	221-30	Gravina	0	0	0	50	350	4,640	10,153	13,700	10,690	18,713	8,340	8,590	4,800	NS	33,512
	71	Two Moon Creek	NS	NS	NS	NS	NS	NS	NS	0	0	10	70	0	0	NS	70
	73	Tundra Creek	NS	NS	NS	NS	NS	NS	NS	0	0	50	110	0	0	NS	110
	76	Irish Creek	NS	NS	0	0	0	35	2,089	1,385	5,700	3,200	3,200	1,400	880	NS	6,557
	80	Whalen Creek	NS	NS	0	0	0	950	1,830	1,950	3,500	4,200	1,700	800	700	NS	6,964
	83	Keta Creek	NS	NS	NS	0	0	400	700	700	0	400	200	0	1,500	NS	1,500
	87	Sunny River	NS	NS	NS	0	0	0	300	800	1,000	100	1,700	0	2,000	NS	2,571
	88	Short creek	NS	NS	NS	0	0	30	335	263	300	100	200	60	0	NS	507
	89	Fish Creek	0	0	0	0	0	1,200	5,700	5,600	4,000	4,300	1,410	1,900	1,300	NS	11,651
	92	Shale Creek	NS	NS	0	0	0	0	41	25	0	80	50	100	170	NS	266
	93	Kirkwood Creek	NS	NS	0	0	0	20	155	85	200	30	80	60	0	NS	246
	94	Rock Creek	NS	NS	0	0	0	0	0	0	0	40	250	30	0	NS	250
	99	Lagoon Creek	NS	NS	NS	0	0	405	2,025	2,650	1,600	900	1,000	1,200	2,700	NS	6,603
	221-40	Fidalgo	0	0	0	0	0	3,040	13,175	13,458	16,300	13,410	9,970	5,550	9,250	NS	37,295
	106	Gladough Creek	NS	NS	NS	0	0	40	315	220	200	200	600	250	320	NS	1,227
	107	Black Creek	NS	NS	NS	0	0	0	25	0	50	10	300	150	30	NS	300
	114	Turner Creek	NS	NS	0	0	0	0	48	0	0	30	140	150	0	NS	150
	115	Millard Creek	NS	NS	0	0	0	2,800	6,000	5,000	5,000	6,000	1,300	3,500	1,300	NS	12,629
	116	Duck River	NS	NS	0	0	0	875	4,550	2,700	6,000	10,000	6,000	5,500	2,000	NS	16,434
	117	Indian Creek	0	0	0	0	100	3,250	4,250	2,650	2,000	3,000	1,000	900	600	NS	8,120
	120	Donaldson Creek	NS	NS	0	0	0	70	118	143	100	30	120	350	200	NS	521
	121	Levshakoff Creek	0	0	0	0	0	1,700	1,700	2,000	2,000	2,300	600	350	NS	NS	4,511
	122	No Name Creek	NS	NS	0	0	0	0	240	600	NC	0	NS	0	NS	NS	600
	123	Gregorieff Creek	0	0	0	0	0	1,350	1,550	1,050	900	850	500	500	NS	NS	4,104
	127	Naomoff Creek	NS	0	0	0	13,000	11,000	19,900	13,750	15,000	4,400	1,300	100	NS	NS	33,256
	129	Vlasoff Creek	NS	NS	NS	0	450	950	4,500	4,300	1,500	550	800	150	NS	NS	5,634
	152	Twin Falls Creek	NS	NS	0	0	125	1,790	4,713	4,250	4,400	1,500	300	350	NS	NS	7,425
	153	Stellar Creek	0	0	0	25	1,500	4,600	4,050	5,000	4,000	4,800	2,000	100	NS	NS	11,044
	221-50	Valdez Arm	0	0	0	25	15,175	28,425	51,959	41,663	41,150	33,670	14,960	12,350	4,450	NS	105,954
	131	Gorge Creek	NS	NS	NS	0	25	120	650	270	500	50	0	0	100	NS	800
	133	Sawmill Creek	NS	NS	NS	0	0	1,385	2,300	1,700	1,000	200	NS	0	NS	NS	2,600
	143	Siwash Creek	NS	NS	NS	0	0	815	1,750	2,000	4,600	250	0	0	0	NS	4,600
	145	Crooked Creek	NS	NS	NS	0	0	800	2,000	300	300	50	0	80	0	NS	2,000
	148	Mineral Creek	NS	NS	NS	0	0	0	20	0	0	0	0	0	100	NS	100
	221-60	Port Valdez	NS	NS	NS	0	25	3,120	6,720	4,270	6,400	550	0	80	200	NS	10,100
Eastern District total			0	0	0	75	15,550	39,930	86,377	78,557	76,734	75,794	34,750	33,240	21,006	1	204,383

-Continued-

District	Stream Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Northern	204	Heather Bay	NS	NS	NS	NS	NS	NS	0	NS	0	0	0	0	NS	NS	0
	208	Granite Cove	NS	NS	NS	NS	NS	NS	10	0	0	0	0	10	NS	NS	10
	209	Useless Cove	NS	NS	NS	0	0	0	0	0	0	0	60	30	0	NS	60
	210	Elf Creek	NS	NS	NS	0	NS	NS	0	NC	0	NS	0	NS	0	NS	0
	213	Bench Mark Creek	NS	NS	0	0	0	0	0	NC	0	0	2	50	0	NS	50
	214	Long Creek	NS	0	0	0	0	450	1,200	4,000	2,390	2,500	1,000	1,400	700	NS	5,423
	216	Vanishing Creek	NS	0	0	0	0	900	900	2,200	3,900	5,500	1,300	900	NS	NS	5,704
	217	Spring Creek	NS	NS	0	0	0	570	575	900	2,600	1,000	700	150	200	NS	2,600
	218	Billy's Hole	NS	NS	NS	0	0	0	30	0	490	50	NC	0	20	NS	490
	221	Eickelberg Creek	NS	NS	NS	0	0	0	50	500	NS	0	30	700	6	NS	700
	222-10	Columbia/Long	NS	0	0	0	0	1,920	2,765	7,600	9,380	9,050	3,092	3,240	926	NS	15,037
	224	Backyard Creek	NS	NS	NS	0	0	0	0	NS	0	300	700	300	250	NS	725
	227	Granite Creek	NS	NS	NS	0	0	0	263	NS	1,060	400	350	500	200	NS	1,426
	229	Cedar Creek	NS	NS	NS	0	0	350	875	1,800	3,400	1,800	2,500	1,600	350	NS	4,668
	232	Delta Creek	NS	NS	NS	0	0	0	0	NS	0	0	0	0	0	NS	0
	233	Surplus Creek	NS	NS	NS	0	0	0	0	700	0	800	0	200	0	NS	800
	234	Wells River	0	0	0	0	0	2,250	3,650	6,100	7,600	6,500	2,400	1,800	1,200	NS	12,240
	257	Complex Creek	NS	NS	NS	NS	0	2	0	0	0	0	NS	0	1,610	NS	1,610
	258	Jonah Creek	NS	NS	NS	NS	0	470	300	3,200	1,500	2,400	900	1,400	3,000	NS	6,679
	263	Waterfall Creek	NS	NS	NS	NS	0	0	0	370	1,800	10	2,500	50	0	NS	2,500
	264	Siwash River	NS	NS	NS	NS	0	0	20	710	200	4,600	500	100	2,500	NS	4,600
	265	Unakwik Creek	NS	NS	NS	NS	60	190	200	1,700	700	1,300	400	200	500	NS	2,178
	222-20	Wells/Unakwik	0	0	0	0	60	3,262	5,308	14,580	16,260	18,110	10,250	6,150	9,610	NS	37,426
	273	Schoppe Creek	NS	NS	NS	NS	0	480	770	2,100	1,500	1,000	400	100	300	NS	2,700
	276	Balck Bear Creek	NS	NS	NS	NS	0	1,200	3,400	3,725	2,000	4,500	1,000	200	0	NS	6,626
	277	Dead Creek	NS	NS	NS	0	0	0	25	50	140	500	150	100	0	NS	500
	278	Comeback Creek	NS	NS	NS	0	0	270	45	550	400	400	85	0	0	NS	533
	279	Canyon Creek	NS	NS	NS	0	150	810	1,500	3,300	2,900	3,500	1,300	500	800	NS	6,414
	282	Good Creek	NS	NS	NS	0	0	70	0	800	0	600	100	100	600	NS	754
	283	Bad Creek	NS	NS	NS	0	0	130	0	370	125	200	400	25	100	NS	400
	289	Derickson Creek	NS	NS	NS	NS	0	0	0	0	NC	25	0	0	0	NS	25
	222-30	Eaglek	NS	NS	NS	0	150	2,960	5,740	10,895	7,065	10,725	3,435	1,025	1,800	NS	17,952
Northern District total			0	0	0	0	210	8,142	13,813	33,075	32,705	37,885	16,777	10,415	12,336	NS	70,415
Unakwik	242	Cowpen Creek	NS	NS	NS	NS	0	0	NS	0	40	0	250	300	2,500	NS	2,500
	229-10	Unakwik Inlet	NS	NS	NS	NS	0	0	NS	0	40	0	250	300	2,500	NS	2,500
Unakwik District total			NS	NS	NS	NS	0	0	NS	0	80	0	500	600	5,000	0	2,500
Coghill	414	Harrison Lagoon	NS	NS	NS	NS	0	0	0	0	60	200	100	150	0	NS	226
	417	Hobo Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0
	421	Mill Creek	NS	NS	NS	NS	0	230	70	940	1,300	2,000	1,000	200	NS	0	2,450
	424	Old Creek	NS	NS	NS	0	0	0	0	0	30	0	700	100	NS	20	700
	425	Hummer Creek	NS	NS	NS	0	0	320	0	675	400	500	2,700	500	NS	20	2,700
	428	Pirate Creek	NS	NS	NS	NS	0	0	0	30	30	0	0	25	NS	0	30
	430	Meacham Creek	NS	NS	NS	0	0	355	1,300	1,375	2,300	3,500	1,600	150	NS	40	4,640
	432	Swanson Creek	NS	NS	NS	0	0	650	950	3,050	3,400	3,050	3,500	2,150	NS	0	7,404
	223-10	W. Port Wells	NS	NS	NS	0	0	1,555	2,320	6,070	7,520	9,250	9,600	3,275	0	80	18,150
	303	Triple Creek	NS	NS	NS	NS	0	0	0	230	200	0	125	75	50	NS	261
	307	Village Creek	NS	NS	NS	NS	0	0	0	20	60	100	200	450	0	NS	450
	223-20	Esther Passage	NS	NS	NS	0	0	0	0	250	260	100	325	525	50	NS	711
	310	Golden Lagoon	NS	NS	NS	0	0	0	0	155	1,100	50	50	25	0	NS	1,100
	314	Avery River	NS	NS	NS	NS	0	0	0	0	0	0	0	50	0	NS	50
	322	Coghill River	NS	NS	NS	0	0	1,375	190	750	800	500	3,600	500	35	NS	3,600
	223-30	E. Port Wells	NS	NS	NS	0	0	1,375	190	905	1,900	550	3,650	575	35	NS	4,750
Coghill District total			NS	NS	NS	0	0	2,930	2,510	7,225	9,680	9,900	13,575	4,375	85	80	23,611

-Continued-

District	Stream Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Northwestern	435	Logging Camp Creek	NS	NS	NS	NS	0	0	0	0	30	NC	300	150	NS	20	300
	450	Tebenkoff Creek	NS	NS	NS	NS	250	100	60	875	300	550	75	100	NS	0	1,500
	451	Blackstone Creek	NS	NS	NS	NS	0	0	10	160	150	50	50	25	NS	0	161
	454	Halferty Creek	NS	NS	NS	0	0	650	300	3,400	3,100	4,000	2,700	100	NS	300	5,907
	455	Paulson Creek	NS	NS	NS	0	150	650	1,200	1,600	1,500	1,500	500	800	NS	50	3,050
	458	Parks Creek	NS	NS	NS	0	0	145	60	2,800	NS	2,200	800	4,100	NS	400	5,319
	461	Cochrane Creek	NS	NS	NS	0	0	110	170	670	450	75	325	600	NS	NS	957
	469	Wickett Creek	NS	NS	NS	NS	0	550	420	1,100	2,300	700	600	500	25	NS	2,300
	224-10	Passage/Cochrane	NS	NS	NS	0	400	2,205	2,220	10,605	7,830	9,075	5,350	6,375	25	770	19,494
	471	Narrows Creek	NS	NS	NS	0	0	0	0	30	30	200	0	125	NS	0	200
	476	Shrode Creek	NS	NS	NS	0	0	690	1,300	3,800	3,000	2,000	2,500	1,600	NS	300	5,739
	479	Cuross Creek	NS	NS	NS	0	0	130	0	50	220	200	500	700	25	20	705
	224-30	Culross Pass	NS	NS	NS	0	0	820	1,300	3,880	3,250	2,400	3,000	2,425	25	320	6,644
	480	Mink Creek	NS	NS	NS	0	100	605	500	3,000	2,100	3,500	3,000	1,000	NS	140	5,544
	484	E. Finger Creek	NS	NS	NS	NS	0	300	230	700	650	500	300	200	NS	5	987
	485	W. Finger Creek	NS	NS	NS	NS	0	1,470	900	4,500	4,500	4,200	1,800	2,200	250	NS	7,055
	493	Most Creek	NS	NS	NS	NS	0	170	0	0	180	5	0	50	0	NS	180
	495	Chimevisky Lagoon	NS	NS	NS	0	0	0	230	500	600	300	100	200	NS	20	716
	498	McClure Creek	NS	NS	NS	0	0	320	120	1,000	900	500	800	500	NS	0	1,688
	224-40	Nellie Juan	NS	NS	NS	0	100	2,865	1,980	9,700	8,930	9,005	6,000	4,150	250	165	16,170
Northwestern District total			NS	NS	NS	0	500	5,890	5,500	24,185	20,010	20,480	14,350	12,950	300	1,255	42,308
Eshamy	506	Loomis Creek	NS	NS	NS	0	0	0	0	0	NS	0	25	500	NS	175	500
	507	Gumboot Creek	NS	NS	NS	NS	0	0	0	0	NS	30	0	0	NS	0	0
	508	Solf Creek	NS	NS	NS	NS	0	0	0	1,200	NS	25	150	500	NS	0	1,200
	510	Elishansky Creek	NS	NS	NS	NS	0	0	110	350	NS	500	200	500	NS	25	901
	511	Eshamy River	NS	NS	NS	NS	0	0	0	0	NS	99	NC	NC	NS	0	108
	225-30	Crafton Island	NS	NS	NS	0	0	0	110	1,550	0	654	375	1,500	0	200	2,709
Eshamy District total			NS	NS	NS	0	0	0	110	1,550	0	654	375	1,500	0	200	2,709

-Continued-

District	Stream Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Total
Southwestern	601	Paddy Creek	NS	NS	NS	NS	0	0	1,700	1,100	80	1,500	1,500	700	NS	0	2,714
	602	Nacktan Creek	NS	NS	NS	NS	0	0	600	1,500	1,200	500	600	2,000	NS	100	2,813
	603	Ewan Creek	NS	NS	NS	NS	0	0	400	3,200	3,000	500	750	500	NS	50	3,636
	604	Erb Creek	NS	NS	NS	NS	0	100	499	699	900	500	500	400	NS	10	1,536
	608	Jackpot River	NS	NS	NS	NS	0	0	400	200	1,600	2,500	1,500	3,500	NS	0	4,146
	610	Kompkoff River	NS	NS	NS	NS	0	0	60	150	200	0	0	510	NS	50	510
	611	Jackpot Bay W. Arm #1	NS	NS	NS	NS	0	0	40	210	20	0	10	75	NS	0	210
	612	Jackpot Bay W. Arm #2	NS	NS	NS	NS	0	0	200	300	10	0	0	0	NS	0	300
	613	Jackson Creek	NS	NS	NS	NS	300	5,000	2,200	2,700	3,000	5,000	1,200	5,500	NS	150	10,526
	621	Totemoff Creek	NS	NS	NS	NS	0	75	1,179	4,599	2,000	1,999	450	2,000	NS	0	5,302
	623	Brizgaloff Creek	NS	NS	NS	NS	NS	0	300	1,900	1,200	700	50	400	NS	3	1,974
	630	Bainbridge Creek	NS	NS	NS	NS	0	0	2,540	1,500	1,200	3,500	1,000	3,700	NS	100	5,769
	632	Claw Creek	NS	NS	NS	NS	0	100	230	950	500	100	0	300	NS	0	951
	633	Pablo Creek	NS	NS	NS	NS	20	698	1,100	1,300	2,400	1,500	1,200	2,100	NS	125	4,448
	634	Passover Creek	NS	NS	NS	NS	0	0	60	NS	0	0	0	0	NS	0	60
	636	Whale Creek	NS	NS	NS	NS	0	0	0	900	200	50	200	100	NS	0	900
	226-20	Chenega	NS	NS	NS	NS	320	5,973	11,508	21,208	17,510	18,349	8,960	21,785	NS	588	45,794
	682	Snug Harbor	NS	NS	NS	NS	600	1,600	1,400	3,400	900	2,200	2,500	2,000	NS	100	5,898
	226-30	Knight Island	NS	NS	NS	NS	600	1,600	1,400	3,400	900	2,200	2,500	2,000	NS	100	5,898
	655	Johnson Creek	NS	NS	NS	NS	0	500	1,500	2,500	800	1,500	2,500	5,000	NS	100	6,121
	656	Halverson Creek	NS	NS	NS	NS	20	0	900	1,400	500	625	2,000	2,500	NS	150	3,405
	665	Bjorn Creek	NS	NS	NS	NS	0	0	0	120	0	15	275	250	NS	120	333
	666	O'Brien Creek	NS	NS	NS	NS	0	53	369	800	300	75	500	1,125	NS	400	1,549
	670	Montgomery Creek	NS	NS	NS	NS	0	NS	NS	0	0	NS	NS	0	0	NS	0
	672	Latouche Creek	NS	NS	NS	NS	0	NS	0	0	0	0	100	120	10	NS	120
	673	Falls Creek	NS	NS	NS	NS	NS	0	0	249	1,700	755	250	900	200	NS	1,700
	676	Horseshoe Creek	NS	NS	NS	NS	0	0	0	0	0	25	0	300	50	NS	300
	677	Hayden Creek	NS	NS	NS	NS	0	50	0	0	400	50	150	650	100	NS	650
	226-40	Bainbridge/Latouche	NS	NS	NS	NS	20	603	2,769	5,069	3,700	3,045	5,775	10,845	360	770	14,177
	653	Hogg Creek	NS	NS	NS	NS	0	0	400	400	300	500	250	650	NS	50	1,084
	226-50	Port Bainbridge	NS	NS	NS	NS	0	0	400	400	300	500	250	650	NS	50	1,084
Southwestern District total			NS	NS	NS	NS	940	8,176	16,077	30,077	22,410	24,094	17,485	35,280	360	1,508	66,953

-Continued-

District	Stream Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Montague	702	Point Creek	NS	NS	NS	NS	NS	0	0	325	0	4,100	NS	3,100	250	NS	4,425
	703	Clam Beach Creek	NS	NS	NS	NS	NS	0	47	1,250	4,200	3,800	NS	1,000	0	NS	5,210
	707	Macleod Creek	NS	NS	NS	NS	NS	0	65	450	1,400	2,400	NS	1,200	250	NS	3,013
	710	Hanning Creek	NS	NS	NS	NS	NS	0	7	150	200	2,900	NS	950	60	NS	2,900
	711	Quadra Creek	NS	NS	NS	NS	NS	0	250	575	1,800	3,700	NS	1,700	300	NS	4,404
	717	Montague Is. W. #1	NS	NS	NS	NS	NS	0	0	50	50	200	NS	50	0	NS	200
	718	Montague Is. W. #2	NS	NS	NS	NS	NS	0	0	50	0	50	NS	35	25	NS	89
	719	Montague Is. W. #3	NS	NS	NS	NS	NS	0	30	50	100	100	NS	200	10	NS	255
	722	Montague Is. W. #4	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	724	Montague Is. W. #5	NS	NS	NS	NS	NS	0	0	10	0	25	NS	0	0	NS	25
	725	Montague Is. W. #6	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	726	Montague Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	227-10	S. Montague	NS	NS	NS	NS	NS	0	399	2,910	7,750	17,275	NS	8,235	895	NS	20,521
	738	Russell Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	3	0	NS	3
	739	Swamp Creek	NS	NS	NS	NS	NS	0	160	650	1,000	3,000	NS	1,000	105	NS	3,180
	740	Kelez Creek	NS	NS	NS	NS	NS	0	0	60	200	800	NS	35	0	NS	800
	741	Chalmers River	NS	NS	NS	NS	NS	40	0	650	600	2,000	NS	1,100	1,050	NS	3,130
	744	Wilby Creek	NS	NS	NS	NS	NS	0	0	100	125	1,000	NS	250	0	NS	1,000
	745	Wild Creek	NS	NS	NS	NS	NS	0	0	0	60	725	NS	125	0	NS	725
	746	Schuman Creek	NS	NS	NS	NS	NS	0	0	0	40	200	NS	0	0	NS	200
	747	Cabin Creek	NS	NS	NS	NS	NS	0	0	1,700	3,000	7,000	NS	4,600	0	NS	8,843
	748	Gilmour Creek	NS	NS	NS	NS	NS	0	0	50	0	75	NS	0	0	NS	75
	749	Shad Creek	NS	NS	NS	NS	NS	0	220	250	2,400	2,300	NS	1,025	10	NS	3,204
	752	Stockdale Creek	NS	NS	NS	NS	NS	0	106	200	1,400	1,000	NS	700	0	NS	1,734
	753	Stockdale Bay	NS	NS	NS	NS	NS	0	0	0	0	125	NS	75	0	NS	125
	754	Dry Creek	NS	NS	NS	NS	NS	0	0	0	900	100	NS	50	0	NS	900
	758	Rocky Bay, Head	NS	NS	NS	NS	NS	0	0	0	50	100	NS	50	0	NS	110
	759	Rocky Creek	NS	NS	NS	NS	NS	0	0	0	300	500	NS	700	0	NS	829
	766	Carr Creek	NS	NS	NS	NS	NS	0	0	0	0	150	NS	35	0	NS	150
	770	Udall Creek	NS	NS	NS	NS	NS	0	0	5	70	125	NS	600	5	NS	600
	771	McKernan Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	774	Rosswog Creek	NS	NS	NS	NS	NS	0	0	750	120	800	NS	250	10	NS	998
	775	Pautzke Creek	NS	NS	NS	NS	NS	0	0	25	0	25	NS	0	0	NS	26
	788	Green Island	NS	NS	NS	NS	0	0	0	NS	0	1	NS	NC	NS	2	4
	227-20	N. Montague	NS	NS	NS	NS	0	40	486	4,440	10,265	20,026	NS	10,598	1,180	2	26,635
Montague District total			NS	NS	NS	NS	0	40	885	7,350	18,015	37,301	NS	18,833	2,075	2	47,156

-Continued-

Appendix F.4. (Page 6 of 6)

District	Stream Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Southeastern	863	Orca Creek	NS	NS	NS	NS	NS	0	0	250	0	NS	NS	50	0	NS	250
	228-10	S. Hawkins	NS	NS	NS	NS	NS	0	0	250	0	NS	NS	50	0	NS	250
	833	Bates Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	834	Hardy Creek	NS	NS	NS	NS	NS	0	3,400	3,500	2,900	NS	NS	75	NS	0	5,536
	835	Scott Creek	NS	NS	NS	NS	NS	0	2,810	2,475	3,300	NS	NS	1,100	NS	50	6,022
	836	Dan's Creek	NS	NS	NS	NS	NS	0	410	480	400	NS	NS	75	NS	10	792
	837	Widgeon Creek	NS	NS	NS	NS	NS	0	0	50	100	NS	NS	75	NS	0	166
	839	Goose Creek	NS	NS	NS	NS	NS	0	420	400	400	NS	NS	25	NS	0	717
	228-20	Hawkins Cutoff	NS	NS	NS	NS	NS	0	7,040	6,905	7,100	NS	NS	1,350	0	60	13,232
	844	Makarka Creek	NS	NS	NS	NS	NS	0	15	NC	800	NS	NS	200	0	NS	970
	847	Hawkins Creek	NS	NS	NS	NS	NS	0	290	300	1,100	NS	NS	800	0	NS	1,781
	849	Rollins Creek	NS	NS	NS	NS	NS	0	37	500	100	NS	NS	135	0	NS	500
	850	Canoe Creek	NS	NS	NS	NS	NS	0	110	0	0	NS	NS	200	50	NS	227
	851	Zillesenoff Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	600	0	NS	600
	856	West Lagoon Creek	NS	NS	NS	NS	NS	0	10	100	200	NS	NS	0	0	NS	205
	857	East Lagoon Creek	NS	NS	NS	NS	NS	0	110	75	300	NS	NS	25	0	NS	343
	858	North Lagoon Creek	NS	NS	NS	NS	NS	0	35	50	50	NS	NS	50	0	NS	117
	861	Bernard creek	NS	NS	NS	NS	NS	0	145	1,000	300	NS	NS	250	0	NS	1,000
	862	Clamdiggers Creek	NS	NS	NS	NS	NS	0	0	25	100	NS	NS	0	0	NS	100
	228-30	N. Hawkins	NS	NS	NS	NS	NS	0	752	2,050	2,950	NS	NS	2,260	50	NS	5,843
	827	Captain Creek	NS	NS	NS	NS	NS	0	0	450	800	4,300	NS	250	25	NS	4,300
	828	Cook Creek	NS	NS	NS	NS	NS	700	480	2,700	5,000	5,600	NS	2,900	25	NS	9,085
	829	King Creek	NS	NS	NS	NS	NS	0	0	25	2,500	1,200	NS	3	10	NS	2,500
	831	Double Creek	NS	NS	NS	NS	NS	0	120	1,100	1,400	1,900	NS	475	0	NS	2,541
	228-40	Double Bay	NS	NS	NS	NS	NS	700	600	4,275	9,700	13,000	NS	3,628	60	NS	18,426
	817	Deer Creek	NS	NS	NS	NS	NS	0	12	100	500	400	NS	500	55	NS	801
	818	Juania Creek	NS	NS	NS	NS	NS	0	67	50	200	1,500	NS	575	100	NS	1,500
	821	Brown Bear Creek	NS	NS	NS	NS	NS	0	750	600	2,500	2,500	NS	545	75	NS	3,522
	228-50	Johnstone	NS	NS	NS	NS	NS	0	829	750	3,200	4,400	NS	1,620	230	NS	5,823
	805	P. Etches South	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	NS	0	0
	806	Dog Salmon Creek	NS	NS	NS	NS	NS	0	0	70	500	350	NS	400	NS	0	706
	807	Beaver Creek	NS	NS	NS	NS	NS	0	0	0	0	10	NS	0	NS	0	10
	810	Garden Creek	NS	NS	NS	NS	NS	0	0	125	1,200	3,000	NS	1,000	NS	15	3,000
	811	Etches Creek	NS	NS	NS	NS	NS	0	0	25	20	75	NS	100	NS	0	127
	812	Nuchek Creek	NS	NS	NS	NS	NS	0	5,300	12,000	9,000	13,500	NS	3,700	NS	300	22,084
	815	Constantine Creek	NS	NS	NS	NS	NS	210	8,100	9,000	11,000	12,100	NS	8,200	NS	1,800	25,569
	228-60	Etches	NS	NS	NS	NS	NS	210	13,400	21,220	21,720	29,035	NS	13,400	NS	2,115	51,496
Southeastern District total			NS	NS	NS	NS	NS	910	22,621	35,450	44,670	46,435	0	22,308	340	2,175	95,070
Total of 9 districts			0	0	0	75	17,200	66,018	147,893	217,469	224,304	252,543	97,812	139,501	41,502	5,221	555,104

[1] Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). A notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (ie. water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than one survey per week were flown, the weekly observation shown in this table is the average of the two counts if observing conditions during both surveys were good or, the maximum of the two counts of conditions during the minimum count were poor.

Appendix F.5. Weekly aerial survey estimates of the escapement of live chum salmon to selected streams in Prince William Sound, 1992.

District	Stream[a] Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Eastern	2	Hartney Creek	NS	NS	NS	NS	NS	20	NS	NS	200	NS	NS	100	NS	10	361
	5	Eccles Creek	NS	NS	NS	NS	NS	0	0	NS	0	0	NS	NC	NS	0	0
	11	Humpback Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	221-10	Orca Inlet	NS	NS	0	0	0	20	0	0	200	0	0	100	0	10	361
	19	Twin Lakes Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	20	Spring Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	21	Rogue Creek	NS	NS	0	0	0	1	0	0	0	0	0	0	0	NS	1
	23	Chase Creek	0	0	0	0	0	0	0	0	0	1	2	6	0	NS	6
	35	Koppen Creek	0	0	0	0	500	30	0	0	500	0	200	0	0	NS	500
	36	Sheep Creek	0	0	0	30	552	700	470	670	NS	1,000	600	800	300	NS	2,054
	37	Allen Creek	NS	NS	NS	0	0	0	0	0	0	0	0	0	0	NS	0
	221-20	Simpson/Sheep	0	0	0	30	1,052	731	470	670	500	1,001	802	806	300	NS	2,561
	41	Plateau Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	45	Pass Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	46	Comfort Creek	NS	NS	0	0	0	0	50	0	0	0	300	5	0	NS	300
	48	Beartrap River	0	50	150	718	1,700	1,150	2,250	2,700	500	500	700	200	100	NS	4,200
	49	Cataract Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	51	Olsen Creek	0	0	40	563	710	1,050	260	2,600	0	100	400	300	0	NS	2,600
	52	Control Creek	NS	NS	0	0	0	650	0	0	0	0	400	0	0	NS	800
	54	Carlsen Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	56	St. Matthews Creek	NS	NS	0	100	0	0	0	0	0	0	150	0	0	NS	150
	221-30	Gravina	0	50	190	1,381	2,410	2,850	2,560	5,300	500	600	1,950	505	100	NS	8,050
	71	Two Moon Creek	NS	NS	NS	NS	NS	NS	NS	0	0	0	0	0	0	NS	0
	73	Tundra Creek	NS	NS	NS	NS	NS	NS	NS	0	0	0	0	0	0	NS	0
	76	Irish Creek	NS	NS	0	0	0	0	230	0	0	0	0	200	0	NS	230
	80	Whalen Creek	NS	NS	0	0	0	0	0	0	0	0	400	0	0	NS	400
	83	Keta Creek	NS	NS	NS	0	0	200	950	600	4,000	0	1,100	1,600	300	NS	4,000
	87	Sunny River	NS	NS	NS	0	0	0	0	0	5,000	700	4,000	900	2,300	NS	6,752
	88	Short creek	NS	NS	NS	0	0	0	0	300	0	0	0	0	0	NS	300
	89	Fish Creek	0	0	0	50	80	0	800	800	0	0	900	0	0	NS	900
	92	Shale Creek	NS	NS	0	0	0	0	0	0	0	0	100	0	30	NS	100
	93	Kirkwood Creek	NS	NS	0	0	0	0	0	50	0	0	20	0	0	NS	50
	94	Rock Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	99	Lagoon Creek	NS	NS	NS	0	0	0	400	300	0	0	2,800	1,900	300	NS	2,800
	221-40	Fidalgo	0	0	0	50	80	200	2,380	2,050	9,000	700	9,320	4,600	2,930	NS	15,532
	106	Gladough Creek	NS	NS	NS	0	0	0	0	0	0	0	0	0	0	NS	0
	107	Black Creek	NS	NS	NS	0	0	0	0	0	0	0	0	0	0	NS	0
	114	Turner Creek	NS	NS	0	0	0	0	0	0	0	0	140	0	0	NS	140
	115	Millard Creek	NS	NS	0	0	0	0	400	0	0	0	2,600	0	0	NS	2,600
	116	Duck River	NS	NS	0	0	0	0	500	500	0	3,000	6,000	1,500	3,000	NS	6,800
	117	Indian Creek	0	0	20	100	1,200	1,000	800	1,200	0	0	700	300	100	NS	1,431
	120	Donaldson Creek	NS	NS	0	0	0	0	0	0	0	0	0	0	0	NS	0
	121	Levshakoff Creek	0	0	0	0	0	0	200	300	0	0	0	100	NS	NS	300
	122	No Name Creek	NS	NS	0	0	0	0	0	0	NC	0	NS	0	NS	NS	0
	123	Gregorieff Creek	0	0	0	0	0	0	150	0	0	0	300	0	NS	NS	300
	127	Naomoff Creek	NS	0	0	25	500	0	2,000	3,000	0	300	700	0	NS	NS	3,000
	129	Vlasoff Creek	NS	NS	NS	0	0	0	500	1,000	0	50	1,400	150	NS	NS	1,400
	152	Twin Falls Creek	NS	NS	0	15	0	0	300	400	0	100	700	250	NS	NS	700
	153	Stellar Creek	0	0	0	20	0	0	800	0	0	0	1,300	0	NS	NS	1,300
	221-50	Valdez Arm	0	0	20	160	1,700	1,000	5,650	6,400	0	3,450	13,840	2,300	3,100	NS	17,971
	131	Gorge Creek	NS	NS	NS	0	0	0	138	0	0	0	0	0	0	NS	250
	133	Sawmill Creek	NS	NS	NS	0	400	0	0	400	0	0	NS	0	NS	NS	400
	143	Siwash Creek	NS	NS	NS	0	5	0	100	200	0	0	30	10	11	NS	200
	145	Crooked Creek	NS	NS	NS	0	35	0	900	500	700	100	360	320	700	NS	1,482
	148	Mineral Creek	NS	NS	NS	0	0	0	25	3	500	200	1,100	710	800	NS	1,997
	221-60	Port Valdez	NS	NS	NS	0	440	0	1,163	1,103	1,200	300	1,490	1,040	1,511	NS	4,329
Eastern District total			0	50	210	1,621	5,682	4,801	12,223	15,523	11,400	6,051	27,402	9,351	7,941	10	48,804

-Continued-

District	Stream Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Northern	204	Heather Bay	NS	NS	NS	NS	NS	NS	0	NS	0	0	0	0	NS	NS	0
	208	Granite Cove	NS	NS	NS	NS	NS	NS	0	0	0	0	0	0	NS	NS	0
	209	Useless Cove	NS	NS	NS	0	0	0	0	0	0	0	0	0	0	NS	0
	210	Elf Creek	NS	NS	NS	0	NS	NS	0	NC	0	NS	0	NS	0	NS	0
	213	Bench Mark Creek	NS	NS	0	0	0	0	0	(2)	0	0	0	0	0	NS	0
	214	Long Creek	NS	0	0	0	200	250	1,200	0	400	500	600	100	200	NS	1,554
	216	Vanishing Creek	NS	0	0	40	200	300	425	100	800	1,000	700	400	NS	NS	1,492
	217	Spring Creek	NS	NS	0	0	0	0	50	0	0	100	300	150	0	NS	300
	218	Billy's Hole	NS	NS	NS	0	0	0	0	0	0	0	NC	20	0	NS	20
	221	Eickelberg Creek	NS	NS	NS	0	0	0	70	0	NS	0	0	0	0	NS	70
	222-10	Columbia/Long	NS	50	210	1,661	6,082	5,351	13,968	15,621	12,600	7,651	29,002	10,021	8,141	NS	52,241
	224	Backyard Creek	NS	NS	NS	0	0	0	0	NS	0	0	0	0	0	NS	0
	227	Granite Creek	NS	NS	NS	0	0	0	30	NS	0	0	0	0	0	NS	30
	229	Cedar Creek	NS	NS	NS	0	0	0	0	0	600	0	0	0	0	NS	600
	232	Delta Creek	NS	NS	NS	0	0	0	0	NS	0	0	0	0	0	NS	0
	233	Surplus Creek	NS	NS	NS	0	0	0	0	0	0	0	0	0	0	NS	0
	234	Wells River	0	10	30	80	500	1,500	2,900	0	200	0	2,000	600	200	NS	3,710
	257	Complex Creek	NS	NS	NS	NS	0	0	0	0	0	0	NS	0	0	NS	0
	258	Jonah Creek	NS	NS	NS	NS	0	185	140	700	400	100	560	400	25	NS	873
	263	Waterfall Creek	NS	NS	NS	NS	0	40	0	0	400	0	400	150	0	NS	400
	264	Siwash River	NS	NS	NS	NS	0	0	77	0	50	200	200	300	0	NS	346
	265	Unakwik Creek	NS	NS	NS	NS	0	90	0	0	0	0	0	0	0	NS	90
	222-20	Wells/Unakwik	0	10	30	80	500	1,815	3,147	700	1,650	300	3,160	1,450	225	NS	6,049
	273	Schoppe Creek	NS	NS	NS	NS	0	700	0	0	200	0	0	0	0	NS	700
	276	Balck Bear Creek	NS	NS	NS	NS	0	320	0	0	500	0	600	300	0	NS	629
	277	Dead Creek	NS	NS	NS	0	0	0	0	0	0	0	50	0	0	NS	50
	278	Comeback Creek	NS	NS	NS	0	0	0	0	0	0	0	0	0	0	NS	0
	279	Canyon Creek	NS	NS	NS	0	20	700	0	0	400	0	800	1,000	0	NS	1,113
	282	Good Creek	NS	NS	NS	0	0	40	30	0	250	200	800	200	0	NS	800
	283	Bad Creek	NS	NS	NS	0	0	0	0	0	125	0	100	75	0	NS	125
	289	Derickson Creek	NS	NS	NS	NS	0	0	0	0	(2)	0	0	0	0	NS	0
	222-30	Eaglek	NS	NS	NS	0	20	1,760	30	0	1,473	200	2,350	1,575	0	NS	3,417
Northern District total			0	60	240	1,741	6,602	8,926	17,145	16,321	15,723	8,151	34,512	13,046	8,366	NS	61,707
Unakwik	242	Cowpen Creek	NS	NS	NS	NS	0	0	NS	0	0	0	0	0	0	NS	0
	229-10	Unakwik Inlet	NS	NS	NS	NS	0	0	NS	0	0	0	0	0	0	NS	0
Unakwik District total			NS	NS	NS	NS	0	0	NS	0	0	0	0	0	0	NS	0
Coghill	414	Harrison Lagoon	NS	NS	NS	NS	0	0	0	0	0	50	0	50	0	NS	50
	417	Hobo Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0
	421	Mill Creek	NS	NS	NS	NS	0	3	30	0	400	400	600	600	NS	130	929
	424	Old Creek	NS	NS	NS	0	0	0	0	40	0	10	50	0	NS	0	50
	425	Hummer Creek	NS	NS	NS	0	10	0	0	0	200	150	500	200	NS	35	500
	428	Pirate Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	430	Meacham Creek	NS	NS	NS	0	0	750	280	88	700	0	25	50	NS	0	1,100
	432	Swanson Creek	NS	NS	NS	0	4	535	450	125	500	1,300	2,050	2,000	NS	110	3,148
	223-10	W. Port Wells	NS	NS	NS	0	14	1,288	760	253	1,800	1,910	3,225	2,900	0	275	5,778
	303	Triple Creek	NS	NS	NS	NS	0	0	0	0	0	0	25	0	0	NS	25
	307	Village Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0
	223-20	Esther Passage	NS	NS	NS	NS	0	0	0	0	0	0	25	0	0	NS	25
	310	Golden Lagoon	NS	NS	NS	0	0	1,200	0	0	0	0	0	0	0	NS	1,200
	314	Avery River	NS	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0
	322	Coghill River	NS	NS	NS	0	0	3,000	0	0	300	0	0	0	0	NS	3,000
	223-30	E. Port Wells	NS	NS	NS	0	0	4,200	0	0	300	0	0	0	0	NS	4,200
Coghill District total			NS	NS	NS	0	14	5,488	760	253	2,100	1,910	3,250	2,900	0	275	10,003

-Continued-

District	Stream Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Northwestern	435	Logging Camp Creek	NS	NS	NS	NS	0	0	0	0	0	NC	0	25	NS	0	25
	450	Tebenkoff Creek	NS	NS	NS	NS	5	100	70	480	500	100	10	25	NS	1	500
	451	Blackstone Creek	NS	NS	NS	NS	0	3	60	0	0	0	0	0	NS	0	60
	454	Halferty Creek	NS	NS	NS	0	15	1,200	500	1,750	2,500	1,500	1,000	2,100	NS	300	4,610
	455	Paulson Creek	NS	NS	NS	0	0	800	300	400	700	150	0	50	NS	0	1,100
	458	Parks Creek	NS	NS	NS	0	0	450	10	400	NS	110	300	0	NS	0	681
	461	Cochrane Creek	NS	NS	NS	0	0	0	0	0	150	0	0	0	NS	NS	150
	469	Wickett Creek	NS	NS	NS	NS	0	0	50	0	200	0	50	0	0	NS	200
	224-10	Passage/Cochrane	NS	NS	NS	0	20	2,553	990	3,030	4,050	1,860	1,360	2,200	0	301	7,326
	471	Narrows Creek	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0	0
	476	Shrode Creek	NS	NS	NS	0	0	650	370	400	500	0	0	0	NS	0	766
	479	Cuross Creek	NS	NS	NS	0	0	350	0	0	30	0	0	0	0	0	350
	224-30	Culross Pass	NS	NS	NS	0	0	1,000	370	400	530	0	0	0	0	0	1,116
	480	Mink Creek	NS	NS	NS	0	0	800	300	0	460	0	0	0	NS	0	1,100
	484	E. Finger Creek	NS	NS	NS	NS	0	140	0	0	150	0	0	0	NS	0	150
	485	W. Finger Creek	NS	NS	NS	NS	20	780	300	0	1,000	0	0	0	0	NS	1,260
	493	Most Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0
	495	Chimevisky Lagoon	NS	NS	NS	0	0	110	0	0	120	0	0	0	NS	20	120
	498	McClure Creek	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0	0
	224-40	Nellie Juan	NS	NS	NS	0	20	1,830	600	0	1,730	0	0	0	0	20	2,630
Northwestern District total			NS	NS	NS	0	40	5,383	1,960	3,430	6,310	1,860	1,360	2,200	0	321	11,072
Eshamy	506	Loomis Creek	NS	NS	NS	0	0	0	0	0	NS	0	0	0	NS	0	0
	507	Gumboot Creek	NS	NS	NS	NS	0	0	0	0	NS	0	0	0	NS	0	0
	508	Solf Creek	NS	NS	NS	NS	0	0	0	300	NS	0	0	0	NS	0	300
	510	Elishansky Creek	NS	NS	NS	NS	0	0	0	0	NS	0	0	0	NS	0	0
	511	Eshamy River	NS	NS	NS	NS	0	0	0	0	NS	NC	NC	NC	NS	0	0
	225-30	Crafton Island	NS	NS	NS	0	0	0	0	300	NS	0	0	0	NS	0	300
Eshamy District total			NS	NS	NS	0	0	0	0	300	NS	0	0	0	NS	0	300

-Continued-

District	Stream [a] Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Southwestern	601	Paddy Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	602	Nacktan Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	603	Ewan Creek	NS	NS	NS	NS	100	0	0	0	1,000	0	0	0	NS	0	1,000
	604	Erb Creek	NS	NS	NS	NS	0	0	NC	NC	0	0	0	0	NS	0	0
	608	Jackpot River	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	610	Kompkoff River	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	611	Jackpot Bay W. Arm #1	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	612	Jackpot Bay W. Arm #2	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	613	Jackson Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	621	Totemoff Creek	NS	NS	NS	NS	0	0	0	0	330	0	10	0	NS	0	330
	623	Brizgaloff Creek	NS	NS	NS	NS	0	0	NC	NC	0	NC	0	0	NS	0	0
	630	Bainbridge Creek	NS	NS	NS	NS	NS	0	0	0	0	0	0	0	NS	0	0
	632	Claw Creek	NS	NS	NS	NS	0	0	280	900	1,200	0	55	50	NS	50	1,200
	633	Pablo Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	634	Passover Creek	NS	NS	NS	NS	0	2	0	0	0	0	0	0	NS	0	0
	636	Whale Creek	NS	NS	NS	NS	0	0	0	NS	0	0	0	0	NS	0	0
	226-20	Chenega	NS	NS	NS	NS	100	2	390	900	2,530	0	65	50	NS	50	2,640
	682	Snug Harbor	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	226-30	Knight Island	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	655	Johnson Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	656	Halverson Creek	NS	NS	NS	NS	0	0	300	300	0	0	0	0	NS	0	300
	665	Bjorn Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	666	O'Brien Creek	NS	NS	NS	NS	0	0	NC	0	0	0	0	0	NS	0	0
	670	Montgomery Creek	NS	NS	NS	NS	0	NS	NS	0	0	NS	NS	0	0	NS	0
	672	Latouche Creek	NS	NS	NS	NS	0	NS	0	0	0	0	0	0	0	NS	0
	673	Falls Creek	NS	NS	NS	NS	NS	0	0	NC	0	0	0	0	0	NS	0
	676	Horseshoe Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0
	677	Hayden Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	0	NS	0
	226-40	Bainbridge/Latouche	NS	NS	NS	NS	0	0	300	300	0	0	0	0	0	0	300
	653	Hogg Creek	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
	226-50	Port Bainbridge	NS	NS	NS	NS	0	0	0	0	0	0	0	0	NS	0	0
Southwestern District total			NS	NS	NS	NS	100	2	690	1,200	2,530	0	65	50	0	50	2,940

-Continued-

District	Stream Number	Stream Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Montague	702	Point Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	703	Clam Beach Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	707	Macleod Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	710	Hanning Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	711	Quadra Creek	NS	NS	NS	NS	NS	0	0	0	300	0	NS	0	0	NS	300
	717	Montague Is. W. #1	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	718	Montague Is. W. #2	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	719	Montague Is. W. #3	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	722	Montague Is. W. #4	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	724	Montague Is. W. #5	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	725	Montague Is. W. #6	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	726	Montague Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	227-10	S. Montague	NS	NS	NS	NS	0	0	0	0	300	0	NS	0	0	NS	300
	738	Russell Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	739	Swamp Creek	NS	NS	NS	NS	NS	0	20	0	0	0	NS	0	50	NS	50
	740	Kelez Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	741	Chalmers River	NS	NS	NS	NS	NS	0	0	50	0	400	NS	300	0	NS	433
	744	Wilby Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	745	Wild Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	746	Schuman Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	747	Cabin Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	748	Gilmour Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	749	Shad Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	752	Stockdale Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	753	Stockdale Bay	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	754	Dry Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	758	Rocky Bay, Head	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	759	Rocky Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	766	Carr Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	770	Udall Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	771	McKernan Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	774	Rosswog Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	775	Pautzke Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	788	Green Island	NS	NS	NS	NS	0	0	0	NS	0	0	NS	NC	NS	0	0
	227-20	N. Montague	NS	NS	NS	NS	0	0	20	50	0	400	NS	300	50	0	483
Montague District total			NS	NS	NS	NS	0	0	20	50	300	400	NS	300	50	0	783

-Continued-

District	Stream [a] Number	Name	Week ending date 6/20	6/27	7/04	7/11	7/18	7/25	8/01	8/08	8/15	8/22	8/29	9/05	9/12	9/19	Adjusted Total
Southeastern	863	Orca Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	228-10	S. Hawkins	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	833	Bates Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	834	Hardy Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	NS	0	0
	835	Scott Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	NS	0	0
	836	Dan's Creek	NS	NS	NS	NS	NS	0	100	0	0	NS	NS	0	NS	0	100
	837	Widgeon Creek	NS	NS	NS	NS	NS	30	0	0	0	NS	NS	0	NS	0	30
	839	Goose Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	NS	0	0
	228-20	Hawkins Cutoff	NS	NS	NS	NS	NS	30	100	0	0	NS	NS	0	0	0	130
	844	Makarka Creek	NS	NS	NS	NS	NS	0	0	NC	0	NS	NS	0	0	NS	0
	847	Hawkins Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	849	Rollins Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	850	Canoe Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	851	Zillesenoff Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	856	West Lagoon Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	857	East Lagoon Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	858	North Lagoon Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	861	Bernard creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	862	Clamdiggers Creek	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	228-30	N. Hawkins	NS	NS	NS	NS	NS	0	0	0	0	NS	NS	0	0	NS	0
	827	Captain Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	828	Cook Creek	NS	NS	NS	NS	NS	0	0	0	900	0	NS	0	0	NS	900
	829	King Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	831	Double Creek	NS	NS	NS	NS	NS	0	0	0	100	0	NS	0	0	NS	100
	228-40	Double Bay	NS	NS	NS	NS	NS	0	0	0	1,000	0	NS	0	0	NS	1,000
	817	Deer Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	0	NS	0
	818	Juania Creek	NS	NS	NS	NS	NS	0	0	0	0	400	NS	0	0	NS	400
	821	Brown Bear Creek	NS	NS	NS	NS	NS	190	550	0	0	0	NS	0	0	NS	550
	228-50	Johnstone	NS	NS	NS	NS	NS	190	550	0	0	400	NS	0	0	NS	950
	805	P. Etches South	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	NS	0	0
	806	Dog Salmon Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	NS	0	0
	807	Beaver Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	NS	0	0
	810	Garden Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	NS	0	0
	811	Etches Creek	NS	NS	NS	NS	NS	0	0	0	0	0	NS	0	NS	0	0
	812	Nuchek Creek	NS	NS	NS	NS	NS	340	0	0	200	0	NS	0	NS	0	343
	815	Constantine Creek	NS	NS	NS	NS	NS	350	0	600	300	500	NS	500	NS	300	1,458
	228-60	Etches	NS	NS	NS	NS	NS	690	0	600	500	500	NS	500	NS	300	1,801
Southeastern District total			NS	NS	NS	NS	NS	910	650	600	1,500	900	NS	500	0	300	3,881
Total of 9 districts			0	110	450	3,362	12,438	25,510	33,448	37,677	39,863	19,272	66,589	28,347	16,357	956	139,490

[a] Failure to fly a survey due to run timing or bad survey conditions is denoted by NS (no survey). A notation of NC (no count) occurs when a stream is flown but no count is possible because of survey conditions (ie. water clarity). During the peak of the pink salmon run many streams are flown twice weekly to provide fisheries managers with more timely escapement data. In cases where more than one survey per week were flown, the weekly observation shown in this table is the average of the two counts if observing conditions during both surveys were good or, the maximum of the two counts of conditions during the minimum count were poor.

Appendix F.6. Temporally stratified age and sex composition of the sockeye salmon escapement through the weir on the outlet stream of Coghill Lake, 1992.

		Brood Year and Age Group							
		1989	1988		1987		1986		
		0.2	0.3	1.2	1.3	2.2	1.4	2.3	Total
Stratum dates:	06/14 – 07/02								
Sampling dates:	06/28 – 06/29								
Sample size:	443								
Female	Percent of sample	0.0	0.5	1.1	47.6	0.2	0.2	1.1	50.8
	Number in escapement	0	25	62	2,598	12	12	62	2,770
Male	Percent of sample	0.2	0.5	7.2	39.5	0.5	0.2	1.1	49.2
	Number in escapement	12	25	394	2,155	25	12	62	2,684
Total	Percent of sample	0.2	0.9	8.4	87.1	0.7	0.5	2.3	100.0
	Number in escapement	12	49	456	4,752	37	25	123	5,454
	Standard error	12	25	72	87	21	17	39	
Stratum dates:	07/03 – 07/12								
Sampling dates:	07/06 – 07/08								
Sample size:	422								
Female	Percent of sample	0.0	0.5	0.2	23.2	0.5	0.0	1.9	26.3
	Number in escapement	0	38	19	1,871	38	0	153	2,119
Male	Percent of sample	0.0	1.2	2.4	64.9	0.2	1.2	3.8	73.7
	Number in escapement	0	95	191	5,230	19	95	305	5,936
Total	Percent of sample	0.0	1.7	2.6	88.2	0.7	1.2	5.7	100.0
	Number in escapement	0	134	210	7,101	57	95	458	8,055
	Standard error	0	50	63	127	33	42	91	
Stratum dates:	07/13 – 08/02								
Sampling dates:	07/16 – 07/17								
Sample size:	428								
Female	Percent of sample	0.0	0.5	0.5	36.4	0.2	0.2	2.6	40.4
	Number in escapement	0	75	75	5,880	38	38	415	6,521
Male	Percent of sample	0.0	0.7	2.3	50.7	0.5	0.5	4.9	59.6
	Number in escapement	0	113	377	8,180	75	75	792	9,612
Total	Percent of sample	0.0	1.2	2.8	87.1	0.7	0.7	7.5	100.0
	Number in escapement	0	188	452	14,060	113	113	1,206	16,133
	Standard error	0	84	129	261	65	65	205	
Strata combined:	06/14 – 08/02								
Sampling dates:	06/28 – 07/17								
Sample size:	1,293								
Female	Percent of sample	0.0	0.5	0.5	34.9	0.3	0.2	2.1	38.5
	Number in escapement	0	138	156	10,349	88	50	629	11,410
Male	Percent of sample	0.0	0.8	3.2	52.5	0.4	0.6	3.9	61.5
	Number in escapement	12	233	962	15,564	119	183	1,159	18,232
Total	Percent of sample	0.0	1.3	3.8	87.4	0.7	0.8	6.0	100.0
	Number in escapement	12	371	1,118	25,913	207	233	1,787	29,642
	Standard error	12	101	160	303	76	80	228	

Appendix F.7. Temporally stratified age and sex composition of the sockeye salmon escapement through the weir at the head of Eshamy Lagoon, 1992.

		Brood Year and Age Group							
		1989		1988		1987		1986	
		0.2	1.1	1.2	2.1	1.3	2.2	2.3	Total
Stratum dates:	06/14 – 07/31								
Sampling dates:	07/17								
Sample size:	432								
Female	Percent of sample	0.2	0.0	52.3	0.0	1.4	1.4	0.0	55.3
	Number in escapement	40	0	9,150	0	243	243	0	9,676
Male	Percent of sample	0.0	0.0	42.8	0.2	0.9	0.5	0.2	44.7
	Number in escapement	0	0	7,490	40	162	81	40	7,814
Total	Percent of sample	0.2	0.0	95.1	0.2	2.3	1.9	0.2	100.0
	Number in escapement	40	0	16,640	40	405	324	40	17,490
	Standard error	40	0	181	40	127	114	40	
Stratum dates:	08/01 – 08/23								
Sampling dates:	08/14								
Sample size:	429								
Female	Percent of sample	1.6	0.5	62.9	0.0	1.6	0.9	0.0	67.6
	Number in escapement	289	83	11,138	0	289	165	0	11,963
Male	Percent of sample	0.7	0.9	28.2	0.7	0.5	1.4	0.0	32.4
	Number in escapement	124	165	4,991	124	83	248	0	5,734
Total	Percent of sample	2.3	1.4	91.1	0.7	2.1	2.3	0.0	100.0
	Number in escapement	413	248	16,129	124	371	413	0	17,697
	Standard error	129	100	243	71	123	129	0	
Stratum dates:	08/24 – 08/31								
Sampling dates:	08/29								
Sample size:	350								
Female	Percent of sample	0.0	0.6	31.4	0.3	2.9	5.1	0.3	40.6
	Number in escapement	0	6	330	3	30	54	3	426
Male	Percent of sample	0.0	4.0	42.0	0.6	2.9	8.3	0.3	58.0
	Number in escapement	0	42	441	6	30	87	3	609
Total	Percent of sample	0.0	4.9	74.6	0.9	5.7	13.4	0.6	100.0
	Number in escapement	0	51	783	9	60	141	6	1,050
	Standard error	0	12	24	5	13	19	4	
Strata combined:	06/14 – 08/31								
Sampling dates:	07/17 – 08/29								
Sample size:	1,211								
Female	Percent of sample	0.9	0.2	56.9	0.0	1.6	1.3	0.0	60.9
	Number in escapement	329	89	20,618	3	562	462	3	22,065
Male	Percent of sample	0.3	0.6	35.7	0.5	0.8	1.1	0.1	39.1
	Number in escapement	124	207	12,922	170	274	415	43	14,157
Total	Percent of sample	1.3	0.8	92.6	0.5	2.3	2.4	0.1	100.0
	Number in escapement	453	299	33,552	173	836	877	46	36,237
	Standard error	135	101	304	82	177	173	41	

Appendix G
Daily Counts and Age and Sex Data
for Brood Stock Escapements to Prince William Sound Hatcheries

Appendix G.1. Daily brood stock counts of chinook salmon at Wally Noerenberg Hatchery, 1992.

	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
08/02	75	97	172	10	27	37
08/03	0	0	0	0	0	0
08/04	0	0	0	0	0	0
08/05	0	0	0	0	0	0
08/06	0	0	0	0	0	0
08/07	0	0	0	0	0	0
08/08	0	0	0	0	0	0
08/09	0	0	0	0	0	0
08/10	103	90	193	90	149	239
Totals	178	187	365	100	176	276

Appendix G.2. Daily brood stock counts of sockeye salmon at Main Bay Hatchery, 1992.

Date	Used for brood stock			Not used for brood stock [a]		
	Male	Female	Total	Male	Female	Total
08/10	52	76	128	4	12	16
08/11	0	0	0	0	0	0
08/12	66	71	137	2	13	15
08/13	58	76	134	4	13	17
08/14	0	0	0	0	0	0
08/15	0	0	0	0	0	0
08/16	117	154	271	6	24	30
08/17	61	78	139	6	19	25
08/18	0	0	0	0	0	0
08/19	110	150	260	11	23	34
08/20	0	0	0	0	0	0
08/21	129	148	277	42	20	62
08/22	0	0	0	0	0	0
08/23	0	0	0	0	0	0
08/24	0	0	0	0	0	0
08/25	0	0	0	0	0	0
08/26	108	146	254	10	25	35
Totals	701	899	1,600	85	149	234

[a] Includes green females, fish otherwise not suitable for egg take use, pond mortalities, and excess fish (jacks).

Appendix G.3. Daily brood stock counts of coho salmon at Solomon Gulch Hatchery and counts of coho salmon collected at Power Creek for Wally Noerenberg Hatchery, 1992.

Solomon Gulch Hatchery	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
08/20	0	0	0	0	0	0
08/21	0	0	0	2	0	2
08/22	0	0	0	0	0	0
08/23	0	0	0	0	0	0
08/24	0	0	0	1	0	1
08/25	0	0	0	1	0	1
08/26	0	0	0	0	0	0
08/27	0	0	0	0	0	0
08/28	0	0	0	0	0	0
08/29	0	0	0	1	0	1
08/30	0	0	0	0	4	4
08/31	0	0	0	0	1	1
09/01	0	0	0	0	0	0
09/02	0	0	0	3	2	5
09/03	0	0	0	1	2	3
09/04	0	0	0	0	0	0
09/05	0	0	0	0	8	8
09/06	0	0	0	2	1	3
09/07	0	0	0	2	2	4
09/08	0	0	0	4	4	8
09/09	0	0	0	1	5	6
09/10	0	0	0	2	3	5
09/11	0	0	0	2	2	4
09/12	0	0	0	3	11	14
09/13	0	0	0	0	0	0
09/14	0	0	0	4	8	12
09/15	0	0	0	0	0	0
09/16	0	0	0	0	0	0
09/17	0	0	0	0	0	0
09/18	0	0	0	0	0	0
09/19	0	0	0	0	6	6
09/20	0	0	0	2	10	12
09/21	0	0	0	0	3	3
09/22	0	0	0	0	2	2
09/23	0	0	0	1	0	1
09/24	0	0	0	2	6	8
09/25	0	0	0	0	2	2
09/26	0	0	0	0	0	0
09/27	0	0	0	0	3	3
09/28	0	0	0	0	1	1
09/29	0	0	0	1	2	3
09/30	0	0	0	1	2	3
10/01	0	0	0	1	5	6
10/02	0	0	0	1	2	3
10/03	0	0	0	0	0	0

-Continued-

Date	Used for brood stock			Not used for brood stock		
	Male	Female	Total	Male	Female	Total
10/04	0	0	0	1	4	5
10/05	0	0	0	1	0	1
10/06	0	0	0	8	9	17
10/07	0	0	0	1	8	9
10/08	0	0	0	1	6	7
10/09	0	0	0	1	3	4
10/10	0	0	0	1	9	10
10/11	0	0	0	0	0	0
10/12	0	0	0	0	2	2
10/13	0	0	0	0	6	6
10/14	0	0	0	0	0	0
10/15	101	304	405	0	42	42
10/16	0	0	0	0	0	0
10/17	0	0	0	0	0	0
10/18	0	0	0	0	0	0
10/19	0	0	0	0	0	0
10/20	0	0	0	0	0	0
10/21	0	0	0	0	0	0
10/22	56	168	224	0	240	240
Totals	157	472	629	52	426	478

Eyak Lake
Power Creek
For Wally Noerenberg Hatchery

Date	Used for brood stock			Not used for brood stock		
	Male	Female	Total	Male	Female	Total
11/13	47	71	118	6	9	15
11/14	0	0	0	0	0	0
11/15	45	80	125	5	13	18
11/16	0	0	0	0	0	0
11/17	0	0	0	0	0	0
11/18	57	85	142	8	13	21
11/19	0	0	0	0	0	0
11/20	68	108	176	7	15	22
11/21	0	0	0	0	0	0
11/22	0	0	0	0	0	0
11/23	0	0	0	0	0	0
11/24	0	0	0	0	0	0
11/25	0	0	0	0	0	0
11/26	72	111	183	7	7	14
11/27	0	0	0	0	0	0
11/28	0	0	0	0	0	0
11/29	67	104	171	3	12	15
Totals	356	559	915	36	69	105

Appendix G.4. Daily brood stock counts of pink salmon at Solomon Gulch, Cannery Creek, Wally Noerenberg, and Armin F. Koernig Hatcheries, 1992.

Solomon Gulch Hatchery	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
07/19	0	0	0	4	0	4
07/20	0	0	0	8	7	15
07/21	976	2,916	3,892	10,040	220	10,260
07/22	1,105	3,315	4,420	8,440	221	8,661
07/23	921	2,762	3,683	4,240	156	4,396
07/24	896	2,688	3,584	5,904	129	6,033
07/25	393	1,178	1,571	2,773	164	2,937
07/26	0	0	0	3	22	25
07/27	2,448	7,344	9,792	2,447	191	2,638
07/28	2,504	7,513	10,017	6,235	241	6,476
07/29	1,983	5,947	7,930	6,603	250	6,853
07/30	2,498	7,493	9,991	3,172	243	3,415
07/31	2,579	7,736	10,315	4,480	350	4,830
08/01	1,682	5,047	6,729	2,242	245	2,487
08/02	0	0	0	43	64	107
08/03	3,100	9,299	12,399	1,901	314	2,215
08/04	2,635	7,905	10,540	1,398	386	1,784
08/05	3,153	9,460	12,613	1,756	414	2,170
08/06	2,389	7,168	9,557	2,048	505	2,553
08/07	2,205	6,616	8,821	2,325	473	2,798
08/08	0	0	0	160	291	451
08/09	0	0	0	162	170	332
08/10	3,888	11,665	15,553	505	619	1,124
08/11	813	2,439	3,252	217	381	598
08/12	1,064	5,664	6,728	381	581	962
08/13	565	2,423	2,988	172	675	847
08/14	498	2,200	2,698	187	172	359
08/15	0	0	0	163	267	430
08/16	0	0	0	193	188	381
08/17	273	820	1,093	205	413	618
08/18	0	0	0	377	535	912
08/19	0	0	0	44	72	116
08/20	180	738	918	320	202	522
08/21	0	0	0	97	164	261
08/22	0	0	0	74	190	264
08/23	0	0	0	91	243	334
08/24	0	0	0	50	101	151
08/25	0	0	0	50	50	100
Totals	38,748	120,336	159,084	69,510	9,909	79,419

-Continued-

Cannery Creek Hatchery	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
08/23	0	0	0	98	45	143
08/24	157	310	467	1,359	141	1,500
08/25	177	325	502	1,579	102	1,681
08/26	48	69	117	547	32	579
08/27	41	51	92	677	53	730
08/28	0	0	0	18	21	39
08/29	470	1,120	1,590	605	149	754
08/30	1,044	3,162	4,206	1,336	210	1,546
08/31	3,361	8,453	11,814	1,570	539	2,109
09/01	2,310	7,676	9,986	2,600	721	3,321
09/02	1,717	5,356	7,073	3,473	437	3,910
09/03	2,305	5,825	8,130	3,913	405	4,318
09/04	1,877	5,535	7,412	2,370	495	2,865
09/05	1,782	5,741	7,523	1,329	259	1,588
09/06	1,880	5,721	7,601	2,984	1,887	4,871
09/07	1,918	5,365	7,283	3,700	804	4,504
09/08	2,052	5,768	7,820	1,263	665	1,928
09/09	1,887	5,744	7,631	1,384	923	2,307
09/10	2,310	6,425	8,735	1,554	1,007	2,561
09/11	2,049	6,267	8,316	1,847	1,007	2,854
09/12	2,303	6,602	8,905	1,632	1,547	3,179
09/13	1,151	3,945	5,096	1,010	268	1,278
Totals	30,839	89,460	120,299	36,848	11,717	48,565

Wally Noerenberg Hatchery	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
08/24	1,125	1,759	2,884	3,531	159	3,690
08/25	477	601	1,078	3,274	67	3,341
08/26	196	308	504	1,594	34	1,628
08/27	363	572	935	1,726	69	1,795
08/28	1,332	2,128	3,460	2,874	184	3,058
08/29	1,646	2,700	4,346	2,770	251	3,021
08/30	2,313	3,776	6,089	3,301	331	3,632
08/31	3,103	5,130	8,233	3,110	359	3,469
09/01	3,171	5,150	8,321	3,380	312	3,692
09/02	3,375	6,369	9,744	1,360	579	1,939
09/03	3,766	6,276	10,042	995	375	1,370
09/04	4,258	7,317	11,575	1,738	595	2,333
09/05	3,801	6,443	10,244	1,281	579	1,860
09/06	3,975	6,777	10,752	1,143	808	1,951
09/07	3,898	6,756	10,654	2,399	792	3,191
09/08	4,417	7,404	11,821	1,484	865	2,349
09/09	4,247	7,255	11,502	1,402	1,058	2,460
09/10	2,977	5,116	8,093	651	632	1,283
09/11	3,073	5,410	8,483	1,418	580	1,998
09/12	2,617	4,337	6,954	1,044	830	1,874
09/13	2,970	5,178	8,148	1,361	1,425	2,786
09/14	2,591	4,623	7,214	2,463	1,773	4,236
09/15	1,967	3,514	5,481	1,875	1,468	3,343
09/16	786	1,312	2,098	1,084	552	1,636
Totals	62,444	106,211	168,655	47,258	14,677	61,935

-Continued-

Armin F. Koernig Hatchery	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
08/24	619	1,032	1,651	2	141	143
08/25	598	1,047	1,645	11	159	170
08/26	689	1,203	1,892	49	141	190
08/27	577	1,008	1,585	55	109	164
08/28	1,451	2,740	4,191	46	134	180
08/29	1,792	3,197	4,989	21	142	163
08/30	2,306	4,094	6,400	29	171	200
08/31	2,712	4,740	7,452	63	276	339
09/01	2,236	3,879	6,115	4,652	297	4,949
09/02	2,621	4,530	7,151	3,852	419	4,271
09/03	3,191	5,446	8,637	98	567	665
09/04	3,000	5,114	8,114	71	424	495
09/05	3,082	5,462	8,544	1,177	456	1,633
09/06	2,814	5,082	7,896	10,634	471	11,105
09/07	2,420	4,206	6,626	1,878	386	2,264
09/08	2,707	4,751	7,458	3,632	414	4,046
09/09	2,253	4,026	6,279	42	225	267
09/10	1,540	2,751	4,291	2,367	179	2,546
09/11	1,338	2,388	3,726	22	151	173
09/12	942	1,670	2,612	22	144	166
09/13	556	1,020	1,576	30	97	127
09/14	551	1,004	1,555	38	116	154
09/15	909	1,681	2,590	2,690	795	3,485
Totals	40,904	72,071	112,975	31,481	6,414	37,895

Appendix G.5. Daily brood stock counts of chum salmon at Solomon Gulch and Wally Noerenberg Hatcheries, 1992.

Solomon Gulch Hatchery	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
08/17	70	209	279	612	47	659
08/18	0	0	0	776	2	778
08/19	0	0	0	10	8	18
08/20	177	542	719	373	30	403
08/21	0	0	0	4	7	11
08/22	0	0	0	6	3	9
08/23	0	0	0	1	1	2
08/24	232	696	928	999	27	1,026
08/25	0	0	0	2	5	7
08/26	269	806	1,075	1,213	54	1,267
08/27	0	0	0	12	38	50
08/28	271	814	1,085	890	56	946
08/29	0	0	0	14	7	21
08/30	0	0	0	24	65	89
08/31	365	1,095	1,460	1,273	49	1,322
09/01	456	1,367	1,823	919	225	1,144
09/02	105	315	420	396	128	524
09/03	383	1,151	1,534	109	176	285
09/04	24	72	96	44	53	97
09/05	0	0	0	31	59	90
09/06	0	0	0	28	83	111
09/07	0	0	0	37	121	158
09/08	72	215	287	339	172	511
09/09	0	0	0	39	124	163
09/10	435	1,303	1,738	619	227	846
09/11	15	46	61	178	20	198
09/12	0	0	0	69	96	165
09/13	0	0	0	12	31	43
09/14	0	0	0	139	88	227
09/15	0	0	0	104	51	155
09/16	0	0	0	58	7	65
09/17	0	0	0	11	0	11
09/18	0	0	0	21	8	29
09/19	0	0	0	32	8	40
Totals	2,395	7,184	9,579	6,613	1,951	8,564

-Continued-

Wally Noerenberg Hatchery	Used for brood stock			Not used for brood stock		
Date	Male	Female	Total	Male	Female	Total
07/05	0	0	0	250	200	450
07/06	169	235	404	1,390	50	1,440
07/07	184	252	436	3,293	33	3,326
07/08	536	737	1,273	1,737	88	1,825
07/09	556	770	1,326	2,656	131	2,787
07/10	809	1,117	1,926	2,134	185	2,319
07/11	220	304	524	1,132	40	1,172
07/12	806	1,068	1,874	1,948	133	2,081
07/13	603	814	1,417	2,111	71	2,182
07/14	1,352	1,964	3,316	3,203	187	3,390
07/15	1,994	2,750	4,744	3,976	284	4,260
07/16	1,790	2,494	4,284	1,383	324	1,707
07/17	1,897	2,707	4,604	2,257	239	2,496
07/18	2,626	3,077	5,703	2,062	365	2,427
07/19	1,931	3,032	4,963	2,281	224	2,505
07/20	1,868	3,011	4,879	951	278	1,229
07/21	1,971	2,918	4,889	1,933	275	2,208
07/22	1,953	2,818	4,771	2,825	294	3,119
07/23	1,749	2,683	4,432	1,846	292	2,138
07/24	2,456	3,552	6,008	2,264	302	2,566
07/25	2,919	4,390	7,309	609	352	961
07/26	2,105	3,112	5,217	1,331	391	1,722
07/27	1,444	2,131	3,575	934	292	1,226
07/28	1,160	1,562	2,722	1,358	317	1,675
07/29	1,342	1,893	3,235	1,032	318	1,350
07/30	1,307	1,958	3,265	450	360	810
07/31	1,031	1,827	2,858	249	742	991
Totals	36,778	53,176	89,954	47,595	6,767	54,362

Appendix G.6. Estimated age and sex composition of chinook salmon in the Wally Noerenberg Hatchery brood stock, 1992.

		Brood Year and Age Group [a]					
		1989	1988	1987	1986	1985	
		1.1	1.2	1.3	1.4	1.5	Total
Sample date:	08/02						
Female	Sample size	0	9	94	1	0	104
	Percent of sample	0.0	4.9	50.8	0.5	0.0	56.2
Male	Sample size	1	46	34	0	0	81
	Percent of sample	0.5	24.9	18.4	0.0	0.0	43.8
Total	Sample size	1	55	128	1	0	185
	Percent of sample	0.5	29.7	69.2	0.5	0.0	100.0
	Standard error	0.5	3.4	3.4	0.5	0.0	
Sample date:	08/11						
Female	Sample size	0	5	214	2	0	221
	Percent of sample	0.0	1.3	53.6	0.5	0.0	55.4
Male	Sample size	9	107	61	0	1	178
	Percent of sample	2.3	26.8	15.3	0.0	0.3	44.6
Total	Sample size	9	112	275	2	1	399
	Percent of sample	2.3	28.1	68.9	0.5	0.3	100.0
	Standard error	0.7	2.3	2.3	0.4	0.3	
Strata combined:							
Sampling dates:	08/02 , 08/11						
Female	Sample size	0	14	308	3	0	325
	Percent of sample	0.0	2.4	52.7	0.5	0.0	55.7
Male	Sample size	10	153	95	0	1	259
	Percent of sample	1.7	26.2	16.3	0.0	0.2	44.3
Total	Sample size	10	167	403	3	1	584
	Percent of sample	1.7	28.6	69.0	0.5	0.2	100.0
	Standard error	0.5	1.9	1.9	0.3	0.2	

[a] Freshwater ages assumed.

Appendix G.7. Estimated age and sex composition of chum salmon in the Solomon Gulch Hatchery brood stock, 1992.

		Brood Year and Age Group				
		1989	1988	1987	1986	
		0.2	0.3	0.4	0.5	Total
Sample date:	08/17					
Female	Sample size	0	49	3	0	52
	Percent of sample	0.0	63.6	3.9	0.0	67.5
Male	Sample size	0	21	4	0	25
	Percent of sample	0.0	27.3	5.2	0.0	32.5
Total	Sample size	0	70	7	0	77
	Percent of sample	0.0	90.9	9.1	0.0	100.0
	Standard error	0.0	3.3	3.3	0.0	
Sample date:	08/28					
Female	Sample size	0	3	0	0	3
	Percent of sample	0.0	4.1	0.0	0.0	4.1
Male	Sample size	1	69	1	0	71
	Percent of sample	1.4	93.2	1.4	0.0	95.9
Total	Sample size	1	72	1	0	74
	Percent of sample	1.4	97.3	1.4	0.0	100.0
	Standard error	1.4	1.9	1.4	0.0	
Sample date:	09/11					
Female	Sample size	0	31	0	1	32
	Percent of sample	0.0	44.9	0.0	1.4	46.4
Male	Sample size	0	36	1	0	37
	Percent of sample	0.0	52.2	1.4	0.0	53.6
Total	Sample size	0	67	1	1	69
	Percent of sample	0.0	97.1	1.4	1.4	100.0
	Standard error	0.0	2.0	1.4	1.4	
Samples Combined :						
Sampling dates:	08/17 – 09/11					
Female	Sample size	0	83	3	1	87
	Percent of sample	0.0	37.7	1.4	0.5	39.5
Male	Sample size	1	126	6	0	133
	Percent of sample	0.5	57.3	2.7	0.0	60.5
Total	Sample size	1	209	9	1	220
	Percent of sample	0.5	95.0	4.1	0.5	100.0
	Standard error	0.5	1.5	1.3	0.5	

Appendix G.8. Temporally stratified age and sex composition of the chum salmon in the Wally Noerenberg Hatchery cost recovery harvest, 1992.

			Brood Year and Age Group				
			1989	1988	1987	1986	
			0.2	0.3	0.4	0.5	Total
Stratum dates:	06/30 –	07/07					
Sampling dates:	07/01 –	07/03					
Sample size:	386						
Female	Percent of sample		0.3	51.0	14.5	0.5	66.3
	Number in catch		23	4,507	1,281	46	5,856
Male	Percent of sample		0.0	26.9	6.7	0.0	33.7
	Number in catch		0	2,379	595	0	2,974
Total	Percent of sample		0.3	78.0	21.2	0.5	100.0
	Number in catch		23	6,886	1,876	46	8,830
	Standard error		23	186	184	32	
Stratum dates:	07/08 –	07/15					
Sampling dates:	07/13						
Sample size:	363						
Female	Percent of sample		0.0	54.0	11.0	0.3	65.3
	Number in catch		0	8,922	1,821	46	10,788
Male	Percent of sample		0.0	30.0	4.1	0.6	34.7
	Number in catch		0	4,962	683	91	5,736
Total	Percent of sample		0.0	84.0	15.2	0.8	100.0
	Number in catch		0	13,884	2,504	137	16,524
	Standard error		0	318	311	79	
Stratum dates:	07/16 –	08/18					
Sampling dates:	07/22 –	07/24					
Sample size:	227						
Female	Percent of sample		0.9	67.4	9.7	0.4	78.4
	Number in catch		221	16,931	2,435	111	19,698
Male	Percent of sample		0.9	18.1	1.8	0.9	21.6
	Number in catch		221	4,537	443	221	5,422
Total	Percent of sample		1.8	85.5	11.5	1.3	100.0
	Number in catch		443	21,468	2,877	332	25,120
	Standard error		220	589	532	191	
Strata Combined:	06/30 –	08/18					
Sampling dates:	07/01 –	07/24					
Sample size:	976						
Female	Percent of sample		0.5	60.1	11.0	0.4	72.0
	Number in catch		244	30,360	5,536	202	36,342
Male	Percent of sample		0.4	23.5	3.4	0.6	28.0
	Number in catch		221	11,878	1,720	312	14,132
Total	Percent of sample		0.9	83.7	14.4	1.0	100.0
	Number in catch		466	42,238	7,257	514	50,474
	Standard error		221	695	643	209	

Appendix G.9. Temporally stratified age and sex composition of sockeye salmon in the Main Bay Hatchery cost recovery harvest, 1992.

		Brood Year and Age Group							
		1989		1988	1987		1986		
		0.2	1.1	1.2	1.3	2.2	1.4	2.3	Total
Sampling dates:	06/21 – 06/27								
Sample size:	598								
Female	Percent of sample	0.2	0.0	29.3	8.7	0.3	0.3	0.0	38.8
	Number in catch	67	0	11,748	3,491	134	134	0	15,574
Male	Percent of sample	0.2	1.2	19.4	11.0	0.3	0.0	0.0	32.1
	Number in catch	67	470	7,787	4,430	134	0	0	12,889
Total	Percent of sample	0.3	1.3	56.0	41.3	0.7	0.3	0.0	100.0
	Number in catch	134	537	22,488	16,581	269	134	0	40,143
	Standard error	95	189	815	809	134	95	0	
Sampling dates:	07/04 – 07/04								
Sample size:	422								
Female	Percent of sample	0.2	0.0	47.2	16.1	0.5	0.0	0.0	64.0
	Number in catch	87	0	17,280	5,905	174	0	0	23,446
Male	Percent of sample	0.2	0.5	23.5	11.8	0.0	0.0	0.0	36.0
	Number in catch	87	174	8,597	4,342	0	0	0	13,199
Total	Percent of sample	0.5	0.5	70.6	28.0	0.5	0.0	0.0	100.0
	Number in catch	174	174	25,877	10,247	174	0	0	36,645
	Standard error	123	123	814	802	123	0	0	
Sampling dates:	07/11 – 07/11								
Sample size:	398								
Female	Percent of sample	0.5	0.0	59.5	12.3	0.0	0.0	0.0	72.4
	Number in catch	404	0	47,842	9,891	0	0	0	58,137
Male	Percent of sample	0.0	1.5	17.3	8.8	0.0	0.0	0.0	27.6
	Number in catch	0	1,211	13,929	7,065	0	0	0	22,205
Total	Percent of sample	0.5	1.5	76.9	21.1	0.0	0.0	0.0	100.0
	Number in catch	404	1,211	61,770	16,957	0	0	0	80,342
	Standard error	285	491	1,700	1,645	0	0	0	
Sampling dates:	07/25 – 07/25								
Sample size:	406								
Female	Percent of sample	0.0	0.7	36.5	15.5	0.0	0.0	0.0	52.7
	Number in catch	0	13	642	273	0	0	0	928
Male	Percent of sample	0.0	2.2	33.0	11.8	0.0	0.0	0.2	47.3
	Number in catch	0	39	581	208	0	0	4	833
Total	Percent of sample	0.0	3.0	69.5	27.3	0.0	0.0	0.2	100.0
	Number in catch	0	52	1,223	481	0	0	4	1,761
	Standard error	0	15	40	39	0	0	4	
Strata Combined:									
Sampling dates:	06/21 – 07/25								
Sample size:	1,824								
Female	Percent of sample	0.4	0.0	48.8	12.3	0.2	0.1	0.0	61.7
	Number in catch	558	13	77,512	19,560	308	134	0	98,085
Male	Percent of sample	0.1	1.2	19.4	10.1	0.1	0.0	0.0	30.9
	Number in catch	154	1,894	30,894	16,046	134	0	4	49,126
Total	Percent of sample	0.4	1.2	70.1	27.9	0.3	0.1	0.0	100.0
	Number in catch	712	1,974	111,359	44,266	442	134	4	158,891
	Standard error	325	541	2,054	2,001	182	95	4	

Appendix H
Mean Length by Sex and Age of Salmon in the Commercial Common Property Catches and Escapements of the Copper/Bering Rivers and Prince William Sound

Appendix H.1. Mean length by sex and age of chinook salmon from the commercial common property drift gillnet catches in the Copper River District, 1992.

		Brood Year and Age Group										
		1989	1988		1987			1986			1985	
		1.1	0.3	1.2	0.4	1.3	2.2	1.4	2.3	3.2	1.5	2.4
Sample date:	05/15											
Females	Mean Length (mm)				869	807	834	917	779			910
	Std. Error				72.0	27.8	0.0	8.2	9.5			9.0
	Sample Size				2	5	1	36	2			2
Males	Mean Length (mm)			563		862	685	932	870			968
	Std. Error			17.8		36.0	0.0	14.9	129.0			30.3
	Sample Size			5		5	1	35	2			4
Sample date:	05/22											
Females	Mean Length (mm)			778		798		882	756		955	899
	Std. Error			77.8		10.7		7.7	22.4		0.0	18.4
	Sample Size			4		15		74	3		1	9
Males	Mean Length (mm)	330		550		819	550	953			927	981
	Std. Error	0.0		20.3		36.7	45.5	14.5			0.0	25.2
	Sample Size	1		6		8	2	41			1	4
Sample date:	05/29											
Females	Mean Length (mm)		735	609	809	797	583	902	781			936
	Std. Error		0.0	19.0	0.0	12.1	0.0	7.2	17.1			21.1
	Sample Size		1	2	1	9	1	55	3			3
Males	Mean Length (mm)			592		784	609	928			929	946
	Std. Error			18.5		13.7	0.0	12.8			49.5	25.8
	Sample Size			3		12	1	42			2	6
Sample date:	06/09											
Females	Mean Length (mm)				906	811		916				864
	Std. Error				0.0	28.2		7.9				22.8
	Sample Size				1	5		26				3
Males	Mean Length (mm)			670		804		941	748			
	Std. Error			24.5		17.7		14.2	0.0			
	Sample Size			2		3		21	1			
Sample date:	06/13											
Females	Mean Length (mm)					810		926	908		883	
	Std. Error					22.4		6.5	0.0		62.5	
	Sample Size					6		53	1		2	
Males	Mean Length (mm)			610				966		572	997	1018
	Std. Error			12.7				9.1		0.0	0.0	0.0
	Sample Size			3				30		1	1	1

Appendix H.2. Mean length by sex and age of sockeye salmon from the commercial common property drift gillnet catches in the Copper River District, 1992.

		Brood Year and Age Group							
		1988		1987			1986		1985
		0.3	1.2	0.4	1.3	2.2	1.4	2.3	2.4
Sample date:	05/15								
Females	Mean Length (mm)	554			557		611	540	
	Std. Error	11.8			3.8		31.0	7.3	
	Sample Size	3			59		2	13	
Males	Mean Length (mm)	546		626	567		611	554	
	Std. Error	4.9		0.0	3.4		0.0	8.7	
	Sample Size	4		1	71		1	15	
Sample date:	05/20								
Females	Mean Length (mm)	549	466		550			524	
	Std. Error	18.5	14.5		4.5			8.6	
	Sample Size	5	2		58			9	
Males	Mean Length (mm)	554	517	584	568	553	500	556	
	Std. Error	14.8	14.9	0.0	4.1	24.2	0.0	9.9	
	Sample Size	6	5	1	69	3	1	13	
Sample date:	05/26								
Females	Mean Length (mm)	537	488		529	442	555	503	511
	Std. Error	13.5	0.0		4.1	22.0	0.0	7.4	0.0
	Sample Size	2	1		58	3	1	18	1
Males	Mean Length (mm)	524	495	547	549			528	598
	Std. Error	29.0	4.8	6.5	6.3			8.3	0.0
	Sample Size	5	4	2	40			8	1
Sample date:	06/02								
Females	Mean Length (mm)	519	492	563	531	449	590	516	
	Std. Error	5.6	4.3	0.0	3.0	0.0	0.0	4.8	
	Sample Size	8	4	1	76	1	1	22	
Males	Mean Length (mm)	533	512		556	428	568	533	
	Std. Error	24.5	16.1		3.9	0.0	0.0	8.4	
	Sample Size	7	3		68	1	1	13	
Sample date:	06/09								
Females	Mean Length (mm)	545	509		562	517		544	
	Std. Error	6.3	4.2		3.2	0.0		12.6	
	Sample Size	3	4		74	1		4	
Males	Mean Length (mm)	579	496		579	479		548	
	Std. Error	23.5	10.8		4.1	0.0		13.4	
	Sample Size	2	9		71	1		4	

Appendix H.3. Mean length by sex and age of sockeye salmon from the commercial common property drift gillnet catches in the Bering River District, 1992.

		Brood Year and Age Group						
		1989		1988		1987	1986	1985
		0.2	1.1	0.3	1.2	1.3	2.3	2.4
Sample date:	06/16							
Females	Mean Length (mm)			517	486	542	556	
	Std. Error			0.0	5.0	2.0	33.5	
	Sample Size			1	6	92	2	
Males	Mean Length (mm)	445	306		505	566		617
	Std. Error	0.0	0.0		14.9	3.7		0.0
	Sample Size	1	1		12	66		1

Appendix H.4. Mean length by sex and age of coho salmon from the commercial common property drift gillnet catches in the Copper River District, 1992.

		Brood Year and Age Group		
		1989	1988	1987
		1.1	2.1	3.1
Sample date:	08/11			
Females	Mean Length (mm)	558	596	
	Std. Error	62.0	33.7	
	Sample Size	2	3	
Males	Mean Length (mm)	541	606	
	Std. Error	28.7	15.4	
	Sample Size	6	19	
Sample date:	08/14			
Females	Mean Length (mm)	560	589	689
	Std. Error	11.3	11.2	0.0
	Sample Size	16	23	1
Males	Mean Length (mm)	591	603	653
	Std. Error	7.9	8.6	34.8
	Sample Size	46	52	3
Sample date:	08/26			
Females	Mean Length (mm)	614	629	613
	Std. Error	4.5	6.5	0.0
	Sample Size	77	44	1
Males	Mean Length (mm)	623	624	706
	Std. Error	8.8	14.0	0.0
	Sample Size	35	22	1
Sample date:	09/09			
Females	Mean Length (mm)	647	650	519
	Std. Error	4.4	6.2	0.0
	Sample Size	59	29	1
Males	Mean Length (mm)	648	656	
	Std. Error	6.7	7.2	
	Sample Size	32	33	

Appendix H.5. Mean length by sex and age of coho salmon from the commercial common property drift gillnet catches in the Bering River District, 1992.

		Brood Year and Age Group		
		1989	1988	1987
		1.1	2.1	3.1
Sample date:	09/03			
Females	Mean Length (mm)	631	637	626
	Std. Error	5.6	6.1	4.5
	Sample Size	50	37	2
Males	Mean Length (mm)	634	647	639
	Std. Error	7.2	7.4	2.6
	Sample Size	37	25	3
Sample date:	09/17			
Females	Mean Length (mm)	648	669	649
	Std. Error	6.2	3.7	14.6
	Sample Size	45	53	3
Males	Mean Length (mm)	651	670	640
	Std. Error	8.6	5.2	0.0
	Sample Size	22	36	1

Appendix H.6. Mean length by sex and age of chinook salmon in the personal–use and subsistence, dip net and fish wheel catches of the upper Copper River near Chitina, 1992.

		Brood Year and Age Group					
		1989	1988	1987		1986	
		1.1	1.2	1.3	2.2	1.4	2.3
Sample dates:	06/06 – 07/18						
Females	Mean Length (mm)	380	605	775	590	899	725
	Std. Error	0.0	21.8	37.7	0.0	6.8	0.0
	Sample Size	1	5	12	1	36	1
Males	Mean Length (mm)	488	721	826		973	
	Std. Error	142.5	77.9	25.8		30.6	
	Sample Size	2	4	5		22	

Appendix H.7. Mean length by sex and age of sockeye salmon in the personal–use and subsistence, dip net and fish wheel catches of the upper Copper River near Chitina, 1992.

		Brood Year and Age Group							
		1989	1988		1987			1986	
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3
Sample dates: 06/05 – 06/07									
Females	Mean Length (mm)	470	542	460		533	462		504
	Std. Error	0.0	7.7	3.2		3.7	6.7		9.4
	Sample Size	1	11	24		57	8		4
Males	Mean Length (mm)	430	567	449		562			551
	Std. Error	0.0	6.4	15.2		4.0			8.3
	Sample Size	1	11	4		42			4
Sample dates: 06/12 – 06/14									
Females	Mean Length (mm)		539	460	585	540	464		529
	Std. Error		7.9	7.7	0.0	4.1	5.3		12.0
	Sample Size		11	13	1	70	5		7
Males	Mean Length (mm)		560	462		575			559
	Std. Error		6.6	9.5		4.3			16.9
	Sample Size		10	6		53			5
Sample dates: 06/19 – 06/21									
Females	Mean Length (mm)	413	531	458		545	469	595	538
	Std. Error	52.2	6.8	3.9		2.6	3.6	0.0	8.3
	Sample Size	6	22	34		120	11	1	18
Males	Mean Length (mm)	450	563	488		573	380	555	555
	Std. Error	0.0	9.2	4.1		4.2	0.0	0.0	9.3
	Sample Size	1	12	9		65	1	1	12
Sample dates: 06/26 – 06/28									
Females	Mean Length (mm)	425	536	445		537	455	543	537
	Std. Error	16.7	9.3	4.1		2.7	7.1	17.5	6.8
	Sample Size	4	8	47		130	14	2	17
Males	Mean Length (mm)	405	559	468		570	483	585	558
	Std. Error	0.0	12.7	12.2		3.0	10.1	0.0	12.1
	Sample Size	1	8	6		66	3	1	12

–Continued–

		Brood Year and Age Group							
		1989	1988		1987			1986	
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3
Sample dates: 07/03 – 07/05									
Females	Mean Length (mm)	439	555	435		558		575	560
	Std. Error	14.6	7.1	8.8		2.8		35.0	5.0
	Sample Size	4	12	15		120		2	2
Males	Mean Length (mm)	435	583	471		575		620	
	Std. Error	0.0	13.2	7.0		3.5		0.0	
	Sample Size	1	4	14		87		1	
Sample dates: 07/10 – 07/12									
Females	Mean Length (mm)		553	461	580	544			555
	Std. Error		13.0	4.2	0.0	2.5			0.0
	Sample Size		6	29	1	143			1
Males	Mean Length (mm)		571	467		574			555
	Std. Error		15.9	14.1		3.5			0.0
	Sample Size		6	7		84			1
Sample dates: 07/17 – 07/19									
Females	Mean Length (mm)		553	478	560	552	480		523
	Std. Error		10.7	2.4	0.0	2.3	2.9		6.0
	Sample Size		5	16	1	165	3		4
Males	Mean Length (mm)		535	477		576		600	
	Std. Error		0.0	4.8		3.7		0.0	
	Sample Size		1	6		76		1	
Sample dates: 07/24 – 07/26									
Females	Mean Length (mm)		525	454	615	549	460	570	490
	Std. Error		10.4	13.4	0.0	2.3	0.0	0.0	0.0
	Sample Size		3	17	1	164	1	1	1
Males	Mean Length (mm)			474		572			
	Std. Error			5.9		3.8			
	Sample Size			11		78			

–Continued–

		Brood Year and Age Group							
		1989	1988		1987			1986	
		0.2	0.3	1.2	0.4	1.3	2.2	1.4	2.3
Sample dates: 07/31 – 08/02									
Females	Mean Length (mm)			470		551			533
	Std. Error			2.1		2.5			12.5
	Sample Size			21		172			2
Males	Mean Length (mm)			474		573		595	
	Std. Error			7.2		4.8		0.0	
	Sample Size			6		61		1	
Sample dates: 08/07 – 08/09									
Females	Mean Length (mm)		595	462		561		600	533
	Std. Error		20.0	10.3		3.0		0.0	2.5
	Sample Size		2	17		140		1	2
Males	Mean Length (mm)			473		577		525	535
	Std. Error			13.8		3.5		0.0	0.0
	Sample Size			6		76		1	1
Sample dates: 08/14 – 08/16									
Females	Mean Length (mm)			475		554		495	550
	Std. Error			2.5		2.5		0.0	0.0
	Sample Size			11		181		1	1
Males	Mean Length (mm)			470		581			620
	Std. Error			15.1		4.3			40.0
	Sample Size			4		70			2

Appendix H.8. Mean length by sex and age of sockeye salmon escapements to the Copper River delta, 1992.

		Brood year and age group									
		1989		1988			1987			1986	
		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3
Eyak Lake – south beaches											
Sample date: 07/20											
Females	Mean Length(mm)	465		531	468			532	426		499
	Std. Error	2.5		7.8	3.3			2.1	0.0		2.0
	Sample Size	2		9	21			159	1		2
Males	Mean Length(mm)	452		550	451			547	441		
	Std. Error	5.5		10.2	2.0			4.3	0.0		
	Sample Size	25		8	223			62	1		
Eyak Lake – Middle Arm											
Sample dates: 06/16 – 09/23											
Females	Mean Length(mm)			548	470			543	470		536
	Std. Error			6.6	3.1			1.2	7.8		7.0
	Sample Size			18	24			337	4		16
Males	Mean Length(mm)	485	319	584	452	328	595	577	512		571
	Std. Error	0.0	6.0	13.2	3.4	0.0	0.0	1.5	8.7		10.8
	Sample Size	1	2	9	84	1	1	201	3		4
Eyak Lake – Hatchery Creek											
Sample dates: 07/14 – 08/05											
Females	Mean Length(mm)			545	479			543			520
	Std. Error			3.1	1.3			1.7			0.0
	Sample Size			35	4			182			1
Males	Mean Length(mm)	409	312	579	431			575			608
	Std. Error	0.0	0.0	6.2	3.6			2.1			0.0
	Sample Size	1	1	21	18			106			1
McKinley Lake											
Sample date: 07/16											
Females	Mean Length(mm)			561	483			562	487		552
	Std. Error			7.9	2.8			2.0	13.1		0.0
	Sample Size			12	57			139	3		1
Males	Mean Length(mm)	419	317	584	440			565	452		
	Std. Error	3.3	3.8	12.1	1.3			3.6	7.0		
	Sample Size	18	5	3	303			109	8		

–Continued–

		Brood year and age group									
		1989		1988			1987			1986	
		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3
27–Mile Slough											
Sample date: 07/08											
Females	Mean Length(mm)	462		560	471			555	487		
	Std. Error	0.0		4.4	13.5			2.1	0.0		
	Sample Size	1		34	7			110	1		
Males	Mean Length(mm)	432	320	584	440			585			
	Std. Error	1.6	2.7	9.1	2.5			6.4			
	Sample Size	129	3	16	83			25			
39–Mile Creek											
Sample date: 08/14											
Females	Mean Length(mm)	483		553	492			557			
	Std. Error	22.9		0.0	2.4			3.4			
	Sample Size	4		2	48			43			
Males	Mean Leng	326	433	330	571	453		588	446		
	Std. Error	6.6	4.3	1.7	0.0	3.9		6.1	0.0		
	Sample Siz	5	39	32	1	121		22	1		
Pleasant Creek											
Sample date: 07/02											
Females	Mean Length(mm)	536		572	490			553	507		
	Std. Error	0.0		4.3	4.5			3.3	9.9		
	Sample Size	1		9	30			52	3		
Males	Mean Length(mm)	424		593	457			578		583	
	Std. Error	3.0		12.9	10.0			13.6		0.0	
	Sample Size	65		4	28			14		1	
Ragged Point Lake											
Sample date: 08/07											
Females	Mean Length(mm)	475		550	466			534	476		522
	Std. Error	3.8		15.4	3.4			2.7	0.0		12.7
	Sample Size	3		8	20			126	1		5
Males	Mean Length(mm)	432	330	543	436			565	473		516
	Std. Error	2.4	4.8	17.0	4.0			4.1	0.0		0.0
	Sample Size	49	11	5	40			75	1		1

–Continued–

		Brood year and age group									
		1989		1988			1987			1986	
		0.2	1.1	0.3	1.2	2.1	0.4	1.3	2.2	1.4	2.3
Martin Lake											
Sample dates: 07/02 – 08/08											
Females	Mean Length(mm)	438		516	461		531	453		561	
	Std. Error	0.0		8.0	1.6		1.9	0.0		7.5	
	Sample Size	1		5	118		185	1		2	
Males	Mean Length(mm)	419	306	557	427		575	435		553	
	Std. Error	5.1	4.0	9.9	1.4		3.7	20.2		18.5	
	Sample Size	28	9	4	356		33	6		2	
Tokun Lake											
Sample date: 08/18											
Females	Mean Length(mm)	497		545	486		548	473			
	Std. Error	0.0		3.7	1.6		1.4	0.0			
	Sample Size	1		4	152		109	1			
Males	Mean Length(mm)			570	437		547				
	Std. Error			5.5	6.5		2.3				
	Sample Size			2	12		211				
Martin River Slough											
Sample date: 06/27											
Females	Mean Length(mm)	452		540	470		544			567	
	Std. Error	14.5		2.7	3.9		2.4			4.0	
	Sample Size	2		74	12		109			2	
Males	Mean Length(mm)	431		561	444		558				
	Std. Error	2.1		5.4	2.1		4.5				
	Sample Size	135		34	156		42				

Appendix H.9. Mean length by sex and age of sockeye salmon escapements to the Bering River drainage, 1992.

		Brood Year and Age Group						
		1989		1988		1987		1986
		0.2	1.1	0.3	1.2	1.3	2.2	2.3
Bering Lake – vicinity of Dick Creek								
Sample date: 07/10								
Females	Mean Length(mm)			567	496	553		547
	Std. Error			0.0	3.9	1.4		14.8
	Sample Size			1	13	193		4
Males	Mean Length(mm)	420		530	438	578	483	550
	Std. Error	13.7		34.5	4.3	1.7	0.0	14.0
	Sample Size	4		2	22	241	1	4
Kushtaka Lake								
Sample date: 08/20								
Females	Mean Length(mm)	460			457	520	468	512
	Std. Error	0.0			3.2	4.1	10.7	12.8
	Sample Size	1			39	33	3	5
Males	Mean Length(mm)		323	514	450	526	456	518
	Std. Error		6.3	0.0	4.5	3.3	9.5	0.0
	Sample Size		8	1	41	32	7	1

Appendix H.10. Mean length by sex and age of sockeye salmon from commercial common property catches in the Northern, Coghill, Eshamy, and Southwestern Districts of Prince William Sound, 1992.

		Brood Year and Age Group								
		1989		1988		1987		1986		1985
		0.2	1.1	0.3	1.2	1.3	2.2	1.4	2.3	2.4
Northern District										
Sample dates:	07/31 – 08/09									
Females	Mean Length(mm)	492			513	554	516		572	
	Std. Error	8.6			5.8	6.5	12.0		5.8	
	Sample Size	4			24	22	10		12	
Males	Mean Length(mm)	566		552	535	594	503		586	
	Std. Error	0.0		19.5	12.3	5.4	26.9		11.6	
	Sample Size	1		2	14	18	6		9	
Coghill District										
Sample dates:	06/13 – 07/14									
Females	Mean Length(mm)			542	519	565	532		567	
	Std. Error			15.5	4.6	3.2	5.3		11.4	
	Sample Size			2	29	71	6		3	
Males	Mean Length(mm)				543	583	540	609	574	579
	Std. Error				3.9	3.9	11.8	0.0	8.4	0.0
	Sample Size				43	41	4	1	7	1
Eshamy District										
Sample dates:	06/22 – 08/21									
Females	Mean Length(mm)	554			527	570	547	557	550	
	Std. Error	0.0			1.0	1.4	4.8	0.0	20.5	
	Sample Size	1			540	319	21	1	2	
Males	Mean Length(mm)	580	423	545	542	587	560	571	576	
	Std. Error	0.0	39.3	0.0	1.4	1.7	5.1	0.0	0.0	
	Sample Size	1	5	1	416	310	26	1	1	
Southwestern District										
Sample date:	08/09									
Females	Mean Length(mm)		422		536	550	548			
	Std. Error		0.0		3.0	19.3	4.5			
	Sample Size		1		85	5	20			
Males	Mean Length(mm)		425		567	605	551			
	Std. Error		2.5		4.7	8.8	7.1			
	Sample Size		2		48	8	10			

Appendix H.11. Mean length by sex and age of chum salmon from commercial common property gillnet catches in the Eshamy District of Prince William Sound, 1992.

		Brood Year and Age Group		
		1988	1987	1986
		0.3	0.4	0.5
Sample date:	06/24			
Females	Mean Length (mm)	588	619	632
	Std. Error	4.4	5.8	8.3
	Sample Size	46	48	19
Males	Mean Length (mm)	581	626	665
	Std. Error	5.6	8.3	7.5
	Sample Size	36	26	22

Appendix H.12. Mean lengths of pink salmon from commercial common property and hatchery cost recovery purse seine catches by district in Prince William Sound, 1992.

Week	Dates	Mean Length (mm)				
		Eastern District		Northern District	Coghill District	Southwestern District
		CPH [a]	HCR [b]	CPH	CPH	CPH
26	06/21 – 06/27		433			
27	06/28 – 07/04		446			
28	07/05 – 07/11	458	466			
29	07/12 – 07/18	458				
30	07/19 – 07/25					
31	07/26 – 08/01			483		484
32	08/02 – 08/08			463	479	470
33	08/09 – 08/15			506		495
34	08/16 – 08/22			485	480	490
35	08/23 – 08/29				485	

[a] Common property harvest

[b] Hatchery cost recovery

Appendix H.13. Mean length by sex and age of sockeye salmon from escapements to Prince William Sound, 1992.

		Brood Year and Age Group								
		1989		1988			1987		1986	
		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3
Coghill Weir										
Sample dates: 06/28 – 07/17										
Females	Mean Length(mm)			564	497		564	493	583	568
	Std. Error			4.6	7.1		1.0	7.5	7.5	4.1
	Sample Size			6	8		464	4	2	24
Males	Mean Length(mm)	460		580	483		588	538	565	583
	Std. Error	0.0		4.4	7.6		0.9	33.5	19.0	4.4
	Sample Size	1		10	52		666	5	8	42
Eshamy Weir										
Sample dates: 07/17 – 08/29										
Females	Mean Length(mm)	523	470		530	440	575	526		540
	Std. Error	5.9	26.1		1.2	0.0	9.0	7.7		0.0
	Sample Size	8	4		606	1	23	28		1
Males	Mean Length(mm)	566	434		558	439	580	570		603
	Std. Error	22.4	7.9		1.3	30.5	10.4	4.9		2.5
	Sample Size	3	18		452	6	16	37		2

Appendix H.14. Mean length by sex and age of chinook salmon brood stock escapements at Wally Noerenberg Hatchery, 1992.

		Brood Year and Age Group				
		1989	1988	1987	1986	1985
		1.1	1.2	1.3	1.4	1.5
Sample Date: 08/02						
Sample Size: 227						
Females	Mean Length (mm)		739	834	720	
	Std. Error		13.4	3.8	0.0	
	Sample Size		9	94	1	
Males	Mean Length (mm)	670	697	852		
	Std. Error	0.0	7.9	7.8		
	Sample Size	1	46	34		
Sample Date: 08/11						
Sample Size: 451						
Females	Mean Length (mm)		773	818	825	
	Std. Error		25.8	2.6	20.0	
	Sample Size		5	214	2	
Males	Mean Length (mm)	662	679	824		895
	Std. Error	11.5	3.7	7.6		0.0
	Sample Size	9	107	61		1

Appendix H.15. Mean length by sex and age of chum salmon brood stock escapements at Wally Noerenberg Hatchery, 1992.

		Brood Year and Age Group			
		1989	1988	1987	1986
		0.2	0.3	0.4	0.5
Sampling dates:	07/16 – 07/21				
Females	Mean Length (mm)		603	639	610
	Std. Error		2.1	5.5	10.0
	Sample Size		149	47	2
Males	Mean Length (mm)		608	653	670
	Std. Error		2.4	5.9	5.0
	Sample Size		208	41	2
Sampling dates:	07/26 – 07/30				
Females	Mean Length (mm)		574	603	
	Std. Error		1.9	6.9	
	Sample Size		236	30	
Males	Mean Length (mm)	508	589	622	
	Std. Error	22.4	3.0	8.0	
	Sample Size	5	167	22	

Appendix H.16. Mean length by sex and age of coho salmon from commercial common property catches in the Coghill District of Prince William Sound, 1992.

		Brood Year and Age Group		
		1989	1988	1987
		1.1	1.2	2.1
Sampling date:	08/31			
Females	Mean Length (mm)	600	620	646
	Std. Error	3.8	0.0	5.0
	Sample Size	140	1	2
Males	Mean Length (mm)	602		697
	Std. Error	7.6		4.0
	Sample Size	52		2

Appendix I
Average Weights of Salmon in the Copper/Bering Rivers and Prince William Sound Commercial Catches

Appendix I.1. Average salmon weights from the commercial common property gillnet and purse seine fisheries in the Copper/Bering and Prince William Sound areas, 1992.

Area/gear	District or Hatchery Name	Location Code	Average weight (kg) [a]				
			Chinook	Sockeye	Coho	Pink	Chum
Copper/Bering River area							
Commecial common Property drift gillnet	Copper River	212	11.37	2.70	4.09	1.48	3.17
	Bering River	200	8.96	2.71	4.36	1.93	3.63
Prince William Sound area							
Commercial common Property drift gillnet	Coghill	223	7.41	2.85	4.02	1.68	3.47
	Eshamy	225	5.78	2.80	3.58	1.64	3.97
	Unakwik	229	5.44	2.80	3.38	1.46	4.10
Commercial common Property set gillnet	Eshamy	225	5.71	2.74	3.37	1.60	3.92
Commercial common Property purse seine	Eastern	221	5.67	2.83	3.84	1.43	3.74
	Northern	222	3.27	2.76	3.51	1.54	3.44
	Coghill	223	4.99	2.78	3.68	1.55	3.36
	Northwestern	224					
	Southwestern	226	5.25	2.78	3.33	1.54	3.27
	Montague	227					
	Southeastern	228					
	Unakwik	229		2.85	2.72	1.53	3.71
Hatchery cost recovery harvest [b]	Solomon Gulch	221–61	2.72	2.80	2.33	1.47	3.54
	Cannery Creek	222–21				1.61	
	Wally Noerenberg	223–41	8.44	3.21	2.81	1.60	3.30
	Armin F. Koernig	226–62		1.89		1.59	
	Main Bay	225–21		2.48		1.47	4.59
Education permit [c] Drift gillnet	All districts combined		9.07	2.79	4.10	1.66	3.57
Confiscated sales	All districts combined			2.90	4.26	1.58	3.76
Test fishery	All districts combined		7.86	2.84			3.57
Test fishery	Coghill District	223		2.84		1.09	3.33
Test fishery	Eshamy District	225	7.86	2.84			3.66

[a] Typically during each fishing period a portion of each delivery to a tender boat is counted into a brailler bag, weighed, and the average weight is computed by dividing the net weight of the brailler load by the number of fish. This average weight is used to estimate the number of fish in the total delivery. The average weight in this table is based on the total weight of the catch by species, gear type, and fishery from fish ticket summaries divided by the total number of fish sold by species, gear type, and fishery as reported on fish tickets.

[b] Harvest is from purse seines.

[c] Cordova High School educational special permit.